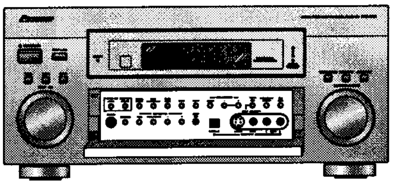
Pioneer sound.vision.soul

PION-06143

Service Manual


VSX-AX5i-S

ORDER NO.
RRV2801

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-AX5i-S
VSX-AX3-S
VSX-AX3-K

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	The voltage can be converted by the following method.
VSX-AX5i-S	HYXJI	AC220-230V	AC240V, *
VSX-AX3-S	HYXJI	AC220-230V	AC240V, *
VSX-AX3-K	HYXJI	AC220-230V	AC240V, *

***:Alter the wiring of the power-supply block at the primary winding of Power transformer referring to the Line Voltage Selection described in Service Manual.**

For details, refer to "Important symbols for good services".

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T-ZZE JULY 2003

SAFTY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

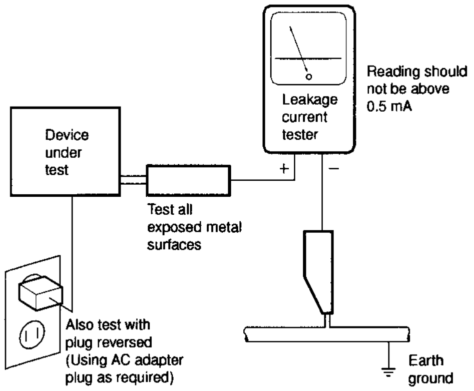
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Reading should not be above 0.5 mA
Leakage current tester
Device under test
+
–
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

[Important symbols for good services]
In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely.
When you find the procedures bearing any of the symbols, be sure to fulfill them:

1. Product safety

You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

2. Adjustments

To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

3. Cleaning

For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

4. Shipping mode and shipping screws

To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

5. Lubricants, glues, and replacement parts

Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount.For replacement parts or tools, the prescribed ones should be used.

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1. SPECIFICATIONS

■ VSX-AX5i-S

Continuous Power Output (DIN)	
Front	100 W + 100 W (DIN 1 kHz, THD 1%, 8 Ω)
Center	100 W (DIN 1 kHz, THD 1%, 8 Ω)
Surround	100 W + 100 W (DIN 1 kHz, THD 1%, 8 Ω)
Surround Back	100 W + 100 W (DIN 1 kHz, THD 1%, 8 Ω)
Rated Power Output	100 W + 100 W (20 Hz – 20 kHz, 0.09 %, 8 Ω)

Audio Section

Input (Sensitivity/Impedance)	
PHONO MM	4.7 mV/47 kΩ
LINE	335 mV/47 kΩ
Frequency Response	
PHONO MM	20 Hz to 20,000 Hz ± 0.3 dB
LINE	5 Hz to 100,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)	
LINE	335 mV/2.2 kΩ
Tone Control	
BASS	± 6 dB (100 Hz)
TREBLE	± 6 dB (10 kHz)
LOUDNESS	+4/+2 dB (100Hz/10 kHz) (at volume position -40dB)
Signal-to-Noise Ratio (IHF, short circuited, A network)	
LINE	101 dB
Signal-to-Noise Ratio [DIN (Continuous rated power output/50 mW)]	
LINE	92/65 dB

Video Section (S jack)

Input (Sensitivity/Impedance)	1 Vp-p/75 Ω
Output (Level/Impedance)	1 Vp-p/75 Ω
Frequency Response	5 Hz to 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio	65 dB

Video Section (Component)

Input (Sensitivity)	1 Vp-p/75 Ω
Output (Level/Impedance)	1 Vp-p/75 Ω
Frequency Response	5 Hz to 40 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio	65 dB

Video Section (Composite)

Input (Sensitivity/Impedance)	
LINE	1 Vp-p/75 Ω
Output (Level/Impedance)	
LINE	1 Vp-p/75 Ω
Frequency Response	
LINE	5 Hz to 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio	65 dB

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono: 15.2 dBf, IHF (1.6 µV/75 Ω)
50 dB Quieting Sensitivity	Mono: 20.2 dBf Stereo: 41.2 dBf
Sensitivity (DIN)	Mono: 1.1 µV (S/N 26 dB) Stereo: 50 µV (S/N 46 dB)
Signal-to-Noise Ratio	Mono: 76 dB (at 85 dBf) Stereo: 72 dB (at 85 dBf)
Signal-to-Noise Ratio (DIN)	Mono: 62 dB Stereo: 58 dB
Distortion	Stereo: 0.6 % (1 kHz)
Alternate Channel Selectivity	70 dB (400 kHz)
Stereo Separation	40 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz (± 1 dB)
Antenna Input	75 Ω unbalanced

AM Tuner Section

Frequency Range	531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna)	350 µV/m
Selectivity	30 dB
Signal-to-Noise Ratio	50 dB
Antenna	Loop antenna

Miscellaneous

Power Requirements	AC 220 – 230 V, 50/60 Hz
Power Consumption	600 W
Power Consumption in Standby mode	0.8 W
AC Outlet SWITCHED	100 W (0.8 A) MAX
Dimensions	420 (W) x 188 (H) x 464 (D) mm
Weight (without package)	19.8 kg

Furnished Parts

FM wire Antenna	1
AM loop Antenna	1
"AA" IEC LR6 batteries	4
Remote Control Unit	1
Microphone for Auto Surround Sound Setup	1
Microphone Stand for Auto Surround Sound Setup	1
AC Power Cord	1
Operating Instructions	1

NOTE:
Specifications and the design are subject to possible modifications without notice, due to improvements.

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- "DTS", "DTS-ES Extended Surround" and "Neo:6" are trademarks of Digital Theater Systems, Inc.

VSX-AX3-S, -K

Continuous Power Output (DIN)	
Front	100 W +100 W (DIN 1 kHz, THD 1%, 8 Ω)
Center	100 W (DIN 1 kHz, THD 1%, 8 Ω)
Surround	100 W +100 W (DIN 1 kHz, THD 1%, 8 Ω)
Surround Back	100 W +100 W (DIN 1 kHz, THD 1%, 8 Ω)
Rated Power Output	100 W + 100 W (20 Hz – 20 kHz, 0.09 %, 8 Ω)

Audio Section

Input (Sensitivity/Impedance)	
LINE	335 mV/47 kΩ
Frequency Response	
LINE	5 Hz to 100,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)	
LINE	335 mV/2.2 kΩ
Tone Control	
BASS	± 6 dB (100 Hz)
TREBLE	± 6 dB (10 kHz)
LOUDNESS	+4/+2 dB (100Hz/10 kHz) (at volume position –40dB)
Signal-to-Noise Ratio (IHF, short circuited, A network)	
LINE	101 dB
Signal-to-Noise Ratio [DIN (Continuous rated power output/50 mW)]	
LINE	92/65 dB

Video Section (S jack)

Input (Sensitivity/Impedance)	1 Vp-p/75 Ω
Output (Level/Impedance)	1 Vp-p/75 Ω
Frequency Response	5 Hz to 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio	65 dB

Video Section (Composite)

Input (Sensitivity/Impedance)	
LINE	1 Vp-p/75 Ω
Output (Level/Impedance)	
LINE	1 Vp-p/75 Ω
Frequency Response	
LINE	5 Hz to 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio	65 dB

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono: 15.2 dBf, IHF (1.6 µV/75 Ω)
50 dB Quieting Sensitivity	Mono: 20.2 dBf Stereo: 41.2 dBf
Sensitivity (DIN)	Mono: 1.1 µV (S/N 26 dB) Stereo: 50 µV (S/N 46 dB)
Signal-to-Noise Ratio	Mono: 76 dB (at 85 dBf) Stereo: 72 dB (at 85 dBf)
Signal-to-Noise Ratio (DIN)	Mono: 62 dB Stereo: 58 dB
Distortion	Stereo: 0.6 % (1 kHz)
Alternate Channel Selectivity	70 dB (400 kHz)
Stereo Separation	40 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz (± 1 dB)
Antenna Input	75 Ω unbalanced

AM Tuner Section

Frequency Range	531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna)	350 µV/m
Selectivity	30 dB
Signal-to-Noise Ratio	50 dB
Antenna	Loop antenna

Miscellaneous

Power Requirements	AC 220 – 230 V, 50/60 Hz
Power Consumption	600 W
Power Consumption in Standby mode	0.8 W
AC Outlet SWITCHED	100 W (0.8 A) MAX
Dimensions	420 (W) x 188 (H) x 464 (D) mm
Weight (without package)	18.3 kg

Furnished Parts

FM wire Antenna	1
AM loop Antenna	1
"AA" IEC LR6 batteries	2
Remote Control Unit	1
Microphone for Auto Surround Sound Setup	1
Microphone Stand for Auto Surround Sound Setup	1
AC Power Cord	1
Operating Instructions	1

NOTE:

Specifications and the design are subject to possible modifications without notice, due to improvements.

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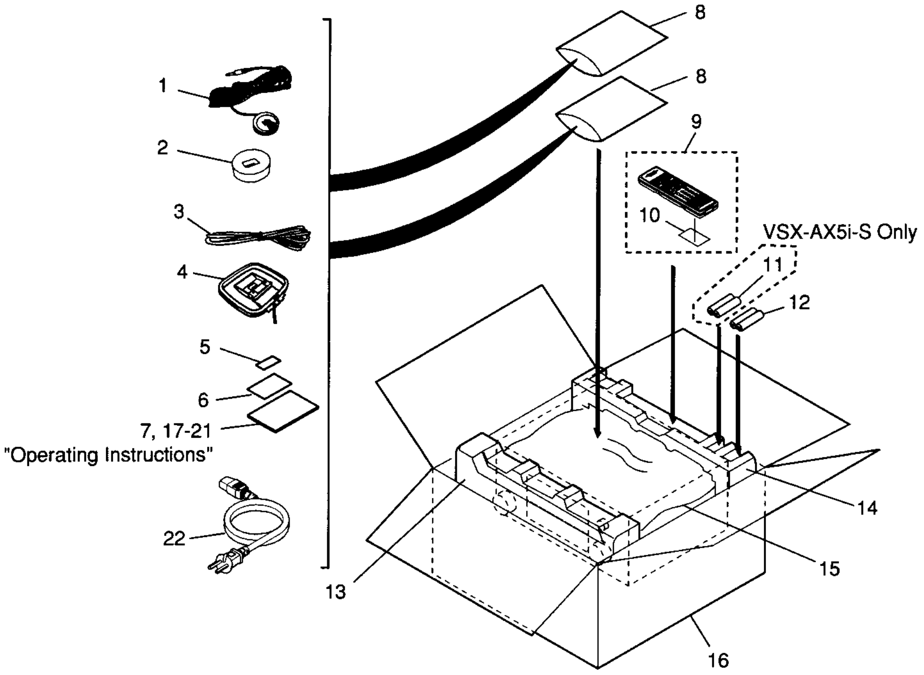
- "DTS", "DTS-ES Extended Surround" and "Neo:6" are trademarks of Digital Theater Systems, Inc.

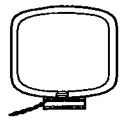
2. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

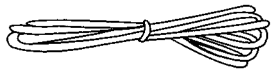
2.1 PACKING



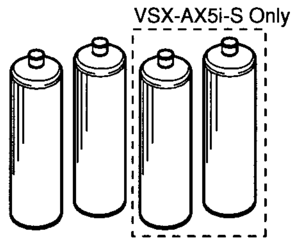
● Accessories



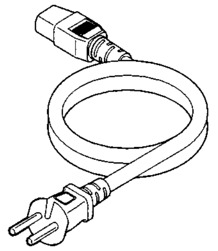
AM Loop Antenna
(ATB7009)



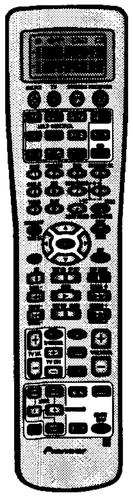
FM Wire Antenna
(ADH7030)



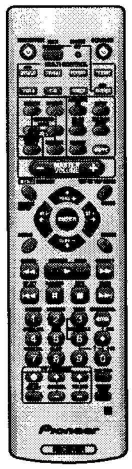
Dry Cell Battery
(LR6, AA)



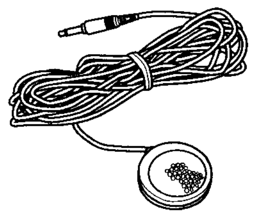
AC Power Cord
(ADG7062)



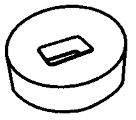
Remote Control Unit
(VSX-AX5i-S : AXD7364)



Remote Control Unit
(VSX-AX3-S, -K : AXD7366)



Microphone for Auto Surround Sound Setup
(APM7004)



Microphone Stand for Auto Surround Sound Setup
(AEB7269)

PACKING parts List

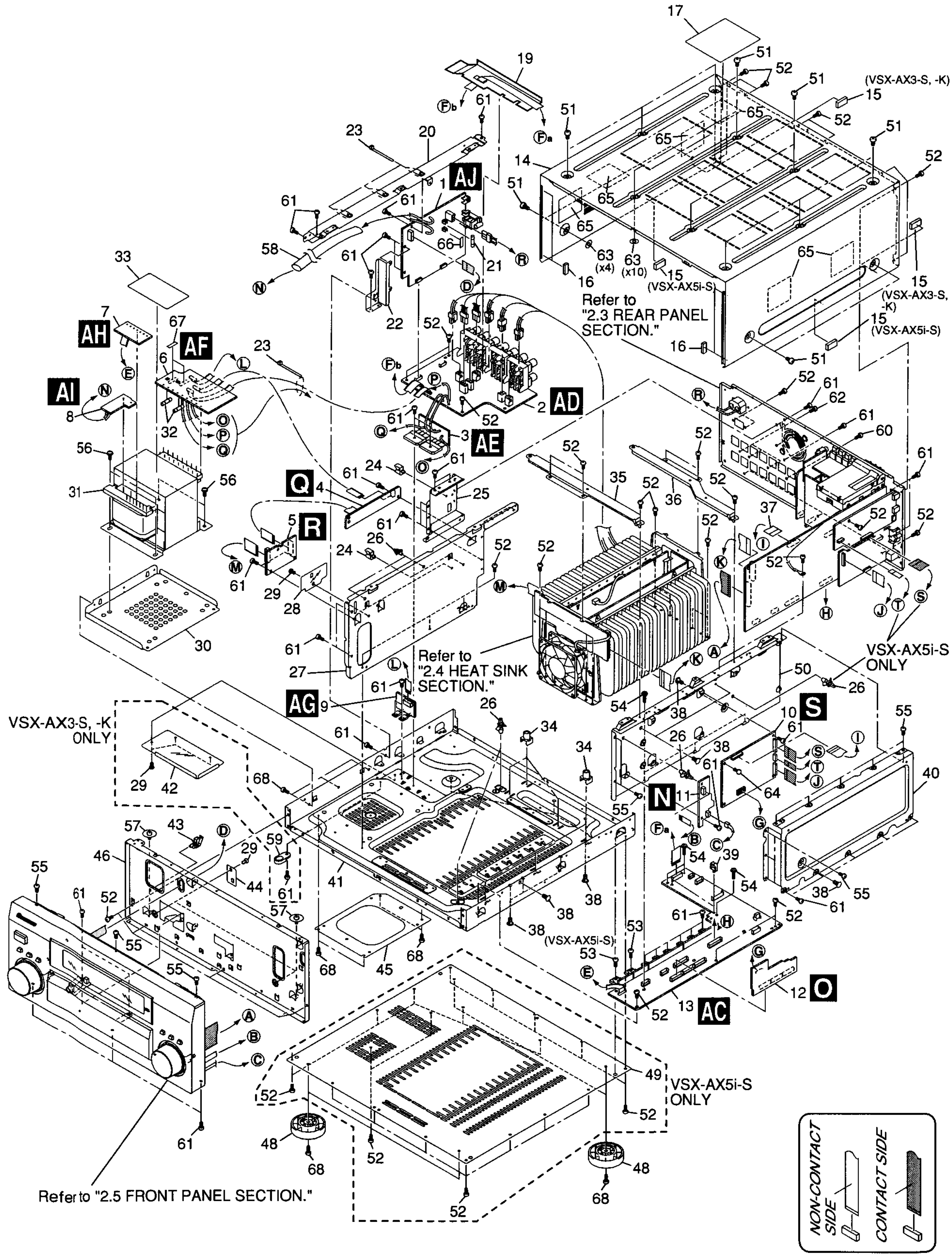
Mark	No.	Description	Part No.
	1	MIC Assy	APM7004
	2	MIC Stand 45	AEB7269
	3	FM Wire Antenna	ADH7030
	4	AM Loop Antenna	ATB7009
	5	Caution Sheet SP,E	ARM7056
NSP	6	Warranty Card	ARY7065
	7	Operating Instructions (English)	See Contrast table (2)
NSP	8	Polyetylene Bag (0.03*230*340)	Z21-038
	9	Remote Control Unit	See Contrast table (2)
	10	Battery Cover	See Contrast table (2)
NSP	11	Alkaline Dry Cell Battery (LR6, AA)	See Contrast table (2)
NSP	12	Alkaline Dry Cell Battery (LR6, AA)	VEM1023
	13	Front Pad 45	AHA7374
	14	Rear Pad 45	AHA7375
	15	Packing Sheet	RHC1023
	16	Packing Case	See Contrast table (2)
	17	Operating Instructions (French)	See Contrast table (2)
	18	Operating Instructions (German)	See Contrast table (2)
	19	Operating Instructions (Italian)	See Contrast table (2)
	20	Operating Instructions (Spanish)	See Contrast table (2)
	21	Operating Instructions (Dutch)	See Contrast table (2)
⚠	22	AC Power Cord	ADG7062

(2) CONTRAST TABLE

VSX-AX5i-S/HYXJI, VSX-AX3-S/HYXJI and VSX-AX3-K/HYXJI are constructed the same except for the following:

Mark	NO	Symbol and Description	VSX-AX5i-S/ HYXJI	VSX-AX3-S/HYXJI	VSX-AX3-K/HYXJI
NSP	7	Operating Instructions (English)	ARB7286	ARB7287	ARB7287
	9	Remote Control Unit	AXD7364	AXD7366	AXD7366
	10	Battery Cover	AZN7940	AZA7424	AZA7424
	11	Alkaline Dry Cell Battery (LR6, AA)	VEM1023	Not used	Not used
	16	Packing Case	AHD8200	AHD8204	AHD8205
	17	Operating Instructions (French)	ARC7477	ARC7483	ARC7483
	18	Operating Instructions (German)	ARC7478	ARC7484	ARC7484
	19	Operating Instructions (Italian)	ARC7479	ARC7485	ARC7485
	20	Operating Instructions (Spanish)	ARC7480	ARC7486	ARC7486
	21	Operating Instructions (Dutch)	ARC7481	ARC7487	ARC7487

2.2 EXTERIOR SECTION


A
B
C
D
E
F
17
19
51
52
(VSX-AX3-S, -K)
15
Fb
61
Fa
65
23
20
14
1
AJ
61
66
21
R
N
58
63 (x4)
63 (x10)
16
15 (VSX-AX5i-S)
Refer to "2.3 REAR PANEL SECTION."
15 (VSX-AX3-S, -K)
15 (VSX-AX5i-S)
33
7
AH
67
AF
6
L
E
23
22
D
AI
N
8
32
O
P
Q
2
AD
3
AE
56
31
62
60
Q
4
24
25
35
36
37
5
R
M
26
29
28
24
30
27
61
Refer to "2.4 HEAT SINK SECTION."
K
A
I
H
J
T
S
VSX-AX5i-S ONLY
50
26
AG
9
54
38
10
S
VSX-AX3-S, -K ONLY
34
55
40
42
68
11
N
64
G
Fa
B
C
39
57
43
46
59
44
41
45
53
38 (VSX-AX5i-S)
13
AC
12
O
49
VSX-AX5i-S ONLY
48
Refer to "2.5 FRONT PANEL SECTION."
NON-CONTACT SIDE
CONTACT SIDE

EXTERIOR SECTION parts List

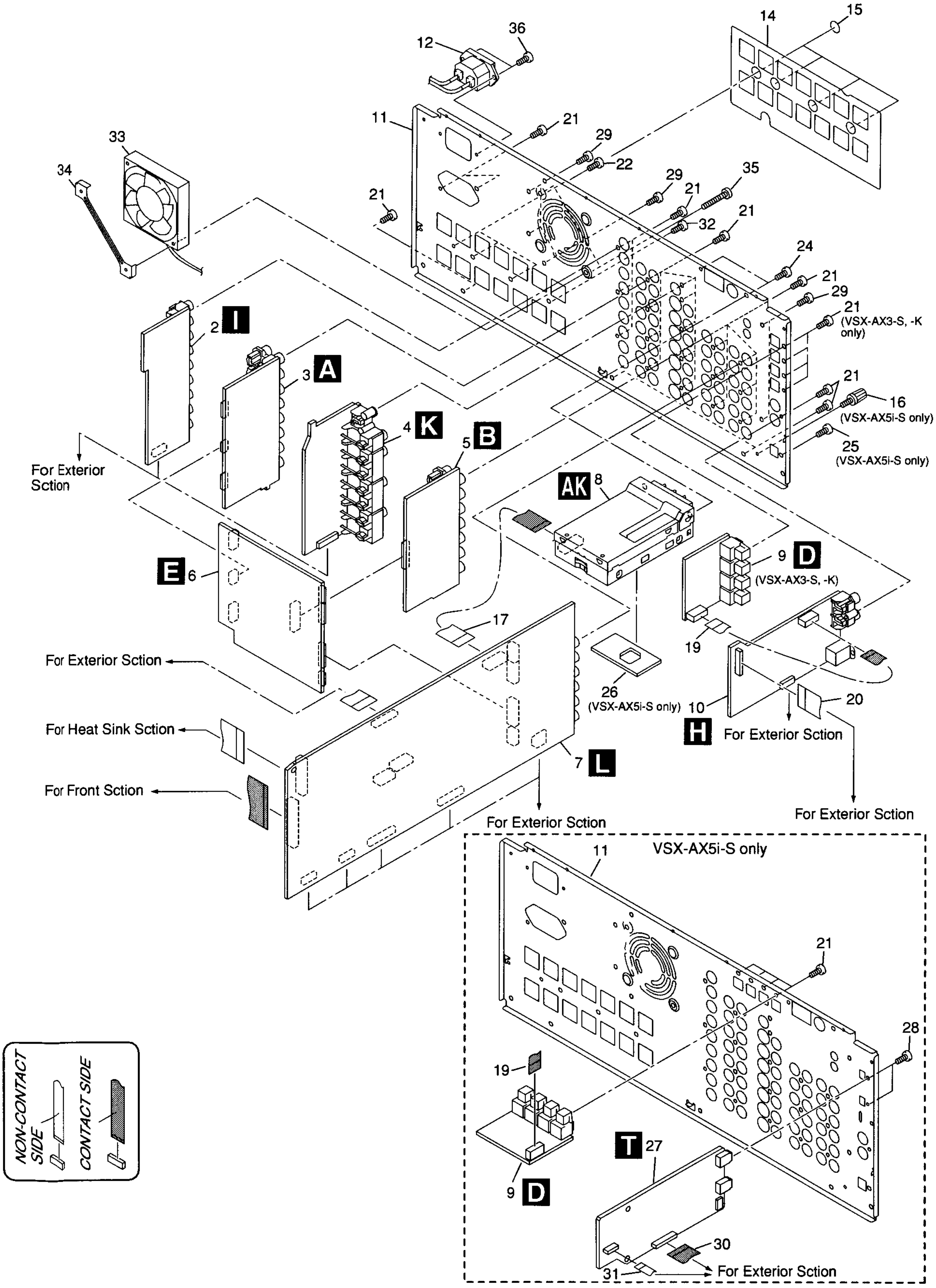
Mark	No.	Description	Part No.
	1	PRIMARY Assy	AWX7998
	2	SP/PS Assy	See Contrast table (2)
	3	DIODE Assy	AWX8017
	4	FAN CONNECTION Assy	AWX8005
	5	FAN DRIVE Assy	AWX8135
	6	TRANS 2-1 Assy	AWX8326
	7	TRANS 2-2 Assy	AWX7970
	8	TRANS 1 Assy	AWX7969
	9	VH TR Assy	AWX8018
	10	DSP ASSY	AWX8249
	11	MIC AMP Assy	AWX8004
	12	DSP CONNECTION Assy	See Contrast table (2)
	13	REGULATOR Assy	See Contrast table (2)
	14	Bonnet Case	See Contrast table (2)
	15	Spacer 45A	AEB7263
	16	Spacer 45B	AEB7264
	17	Label (DD/DTS/THX)	ARW7177
	18	••••••	
	19	Barrier 45	AEC7444
	20	Left Beam 45	ANG7401
⚠	21	FU1 Fuse (4A)	REK-106
	22	Primary Angle 35	ANG7301
NSP	23	Binder	ZCA-BK1
NSP	24	Mini Clamp	VEC1597
	25	Fan Box 45	ANG7413
	26	Locking Card Spacer	PNW2917
	27	Trans Shield 45	ANG7400
	28	Styling Sheet B	AEC7437
	29	Push Rivet	AEC7370
	30	Trans Frame 45	ANG7399
⚠	31	T1 Power Transformer	ATS7329
⚠	32	FU4,FU5 Fuse (2.5A)	REK1026
NSP	33	Trans Label 45	AAX7957
	34	PCB Mold	AMR2534
	35	Bridge Frame 45F	ANG7409
	36	Bridge Frame 45R	ANG7410
	37	J7 21P FFC/60V	ADD7355
	38	Card Spacer	DNK2769
	39	••••••	
	40	DSP Shield 45B	ANG7403
NSP	41	Under Base	See Contrast table (2)
	42	Screw Cover 45A	See Contrast table (2)
NSP	43	Wire Saddle	DEC1450
	44	Styling Sheet	AEC7413
	45	Stabilizer 45	ANG7408
NSP	46	Panel Stay 45	AND7047
	47	••••••	
	48	Insulator	See Contrast table (2)
	49	Bottom Plate 45	See Contrast table (2)
	50	DSP Shield 45A	See Contrast table (2)
	51	Screw	See Contrast table (2)
	52	Screw	BBZ30P080FCC
	53	Screw	BBZ30P100FCC
	54	Screw	IBZ30P150FCC
	55	Screw	BBT30P080FCC
	56	Screw	ABA7066
	57	Screw	ABA7009
	58	UL Tube	ADN7007
	59	Screw Cover See "2.5 FRONT PANEL SECTION" No. 19-3	
	60	Screw	ABA1208
	61	Screw	IBZ30P080FCC
	62	Screw	IBZ30P100FCC
	63	Spacer Circle	AEC7330
	64	Nylon Rivet	AEC7408
	65	Bonnet Sheet	AEB7265
NSP	66	Fuse Card	AAX7099
NSP	67	Fuse Card	AAX7277
	68	Screw	See Contrast table (2)

(2) CONTRAST TABLE

VSX-AX5i-S/HYXJI, VSX-AX3-S/HYXJI and VSX-AX3-K/HYXJI are constructed the same except for the following:

Mark	NO	Symbol and Description	VSX-AX5i-S/ HYXJI	VSX-AX3-S/HYXJI	VSX-AX3-K/HYXJI
NSP	2	SP/PS Assy	AWX8308	AWX8039	AWX8039
	12	DSP CONNECTION Assy	AWX8299	AWX8024	AWX8024
	13	REGULATOR Assy	AWX8305	AWX8020	AWX8020
	14	Bonnet Case	AZN7899	AZN7899	AZN7897
NSP	41	Under Base	ANA7138	ANA7158	ANA7158
	42	Screw Cover 45A	Not used	AEC7414	AEC7414
	48	Insulator	VXA2368	PNW2766	PNW2766
	49	Bottom Plate 45	ANF7031	Not used	Not used
	50	DSP Shield 1394A	ANG7420	Not used	Not used
	50	DSP Shield 45A	Not used	ANG7402	ANG7402
	51	Screw	BBZ40P080FCC	BBZ40P080FCC	BBZ40P080FZK
	68	Screw	BBZ30P080FCC	IBZ30P080FCC	IBZ30P080FCC

2.3 REAR PANEL SECTION



14
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36
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33
34
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35
21
21
32
21
24
21
29
21
(VSX-AX3-S, -K only)
2 I
3 A
21
4 K
16
(VSX-AX5i-S only)
5 B
25
(VSX-AX5i-S only)
For Exterior Sction
AK 8
E 6
9 D
(VSX-AX3-S, -K)
17
For Exterior Sction
19
26
(VSX-AX5i-S only)
10
20
For Heat Sink Sction
H
For Exterior Sction
7 L
For Front Sction
For Exterior Sction
For Exterior Sction
11
VSX-AX5i-S only
21
28
NON-CONTACT SIDE
CONTACT SIDE
19
T 27
9 D
30
31
For Exterior Sction

REAR PANEL SECTION parts List

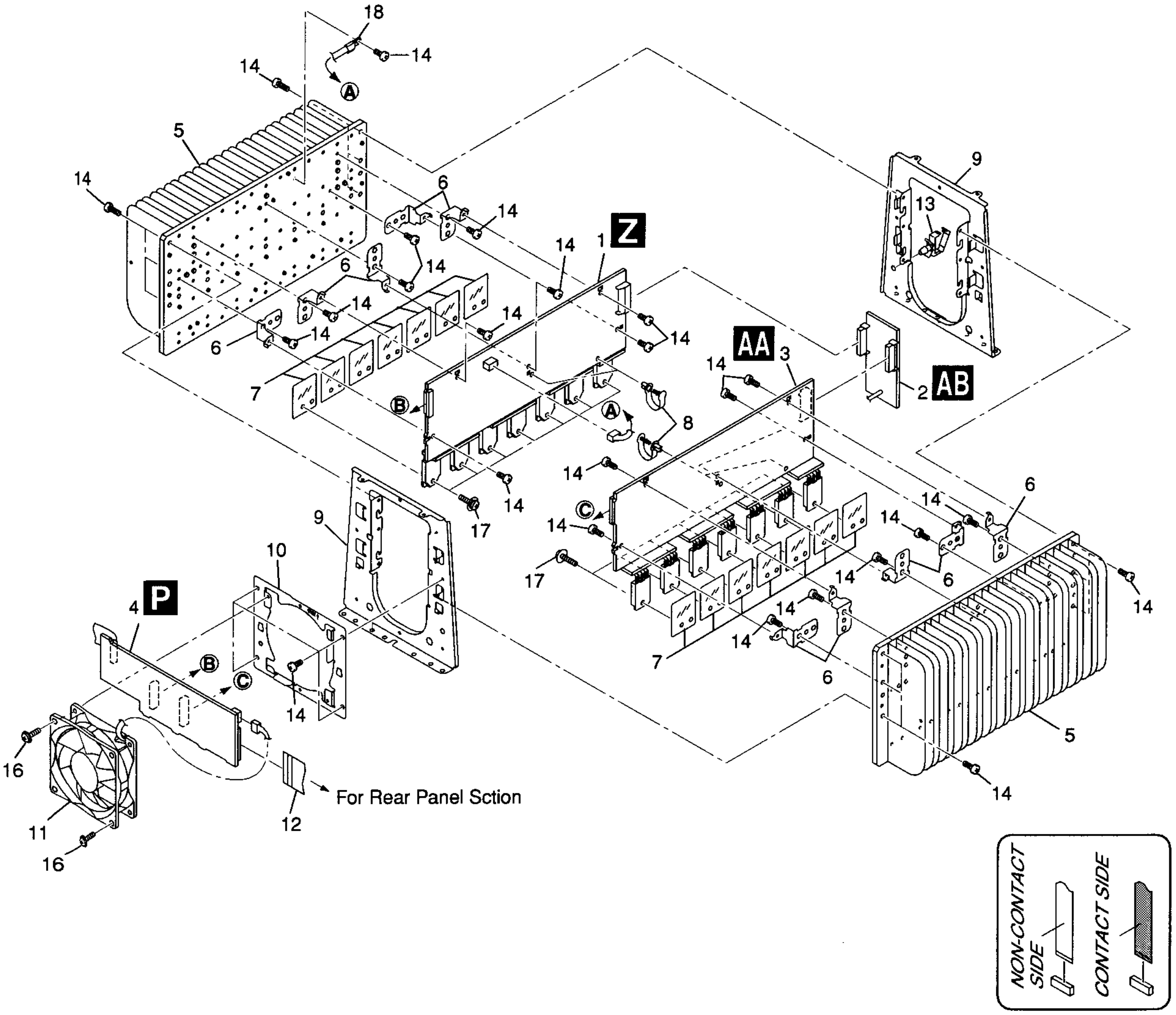
Mark	No.	Description	Part No.
	1	••••••	
	2	COMPONENT Assy	See Contrast table (2)
	3	7.1CH I/O Assy	See Contrast table (2)
	4	VIDEO Assy	See Contrast table (2)
	5	V-AUDIO IN Assy	See Contrast table (2)
	6	INPUT CONNECT Assy	AWX8041
	7	MAIN CONTROL Assy	See Contrast table (2)
	8	FM/AM TUNER Module	AXQ7232
	9	OPTICAL IN Assy	AWX7978
	10	COAXIAL IN Assy	See Contrast table (2)
	11	Rear Panel	See Contrast table (2)
⚠	12	AC Inlet Assy	ADX7411
	13	••••••	
	14	Speaker Sheet	AAK8016
	15	Cushion Circle 16B	AED7052
	16	Screw with Terminal	See Contrast table (2)
	17	J8 13P FFC/60V	ADD7356
	18	••••••	
	19	J5 9P FFC/60V	See Contrast table (2)
	20	J6 20P FFC/60V	ADD7354
	21	Screw	BBZ30P080FCC
	22	Screw	IBZ30P100FCC
	23	••••••	
	24	Screw	VPZ30P100FZK
	25	Screw	See Contrast table (2)
	26	Tuner Spacer	See Contrast table (2)
	27	1394 Assy	See Contrast table (2)
	28	Screw	See Contrast table (2)
	29	Screw	IBZ30P080FCC
	30	J16 22P FFC/60V	See Contrast table (2)
	31	J17 10P FFC/60V	See Contrast table (2)
	32	Screw	ABA1208
⚠	33	Fan Motor	AXM7020
	34	Fan Plate	ANG7153
	35	Screw	BBZ30P200FZK
	36	Screw	CBZ30P080FZK

(2) CONTRAST TABLE

VSX-AX5i-S/HYXJI, VSX-AX3-S/HYXJI and VSX-AX3-K/HYXJI are constructed the same except for the following:

Mark	NO	Symbol and Description	VSX-AX5i-S/ HYXJI	VSX-AX3-S/HYXJI	VSX-AX3-K/HYXJI
	2	COMPONENT Assy	AWX8293	AWX8296	AWX8296
	3	7.1CH I/O Assy	AWX8306	AWX7973	AWX7973
	4	VIDEO Assy	AWX8312	AWX8322	AWX8322
	5	V-AUDIO IN Assy	AWX8314	AWX7991	AWX7991
	7	MAIN CONTROL Assy	AWX8287	AWX8291	AWX8291
	10	COAXIAL IN Assy	AWX8300	AWX8323	AWX8323
	11	Rear Panel	ANC8193	ANC8197	ANC8198
	16	Screw with Terminal	AKE-031	Not used	Not used
	19	J5 9P FFC/60V	ADD7430	ADD7353	ADD7353
	25	Screw	PMZ30P060FCC	Not used	Not used
	26	Tuner Spacer	AEB7314	Not used	Not used
	27	1394 Assy	AWK7768	Not used	Not used
	28	Screw	PCZ26P060FMC	Not used	Not used
	30	J16 22P FFC/60V	ADD7431	Not used	Not used
	31	J17 10P FFC/60V	ADD7432	Not used	Not used

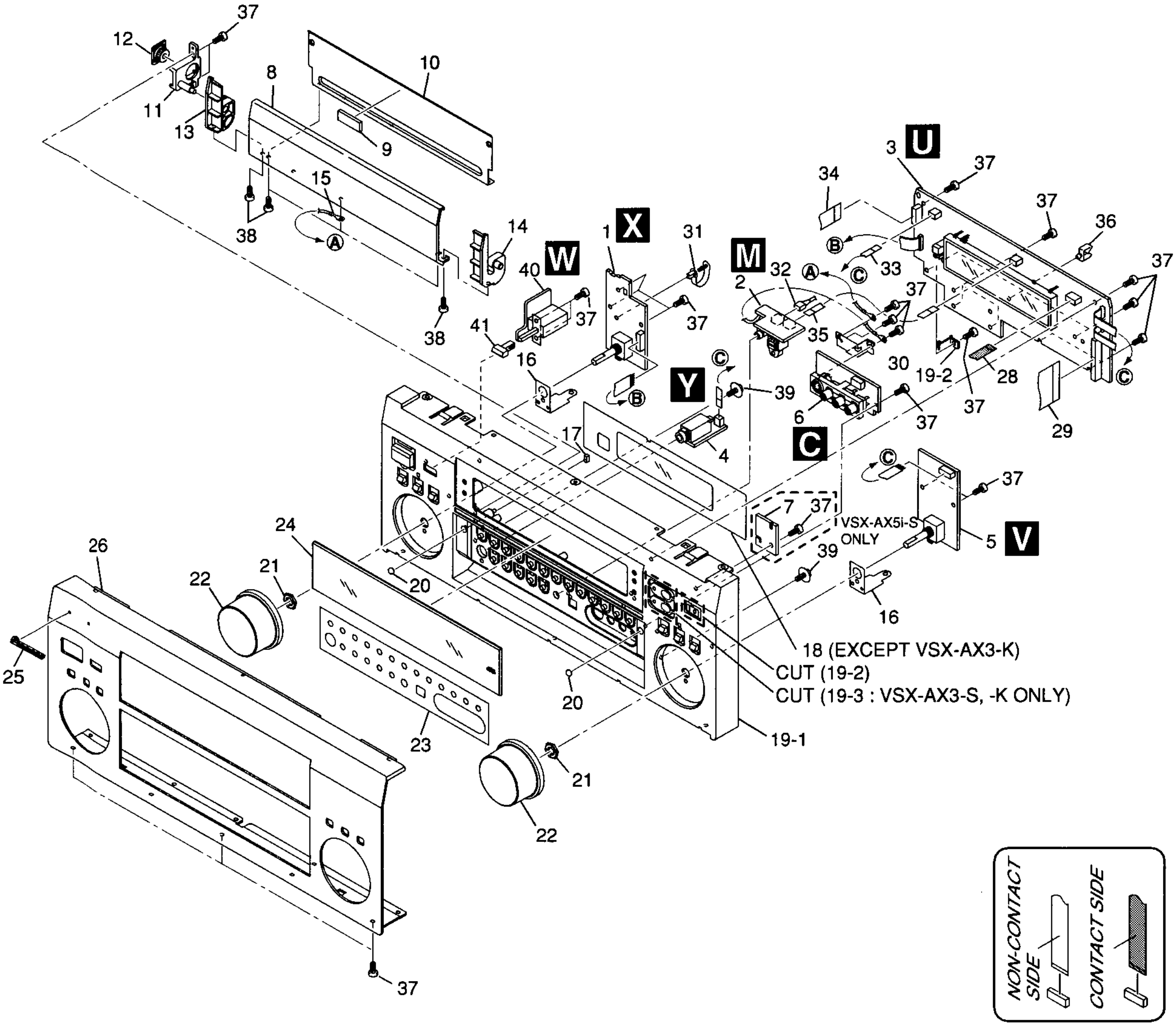
2.4 HEAT SINK SECTION


18
14
14
A
5
14
6
14
6
14
14
1 Z
14
6
14
14
6
14
7
B
A
8
14
AA 3
2 AB
9
13
14
17
14
C
14
9
10
4 P
B
C
14
17
14
6
14
14
6
14
14
14
7
6
5
14
14
16
11
16
12
For Rear Panel Sction
NON-CONTACT SIDE
CONTACT SIDE

HEAT SINK SECTION parts List

Mark	No.	Description	Part No.
	1	POWER AMP-L Assy	AWX7984
	2	POWER AMP-C Assy	AWX7986
	3	POWER AMP-R Assy	AWX7985
	4	POWER AMP IN Assy	AWX7982
NSP	5	Heat Sink 45	ANH7152
	6	PCB Angle 45	ANG7406
	7	Mica Sheet 45	AEE7047
NSP	8	Speed Clamp	AEC7445
	9	H.S Angle 45	ANG7404
	10	Fan Holder 80	ANG7407
⚠	11	Fan Motor	AXM7023
	12	J14 24P FFC/60V	ADD7357
NSP	13	Wire Saddle	DEC1450
	14	Screw	BBZ30P100FCC
	15	• • • • •	
	16	Screw	BBZ30P300FMC
	17	Screw	ABA7085
⚠	18	TH1 Thermistor	AEX7004

2.5 FRONT PANEL SECTION


1 X
2 M
3 U
4
5 V
6
7
8
9
10
11
12
13
14
15
16
17
18 (EXCEPT VSX-AX3-K)
19-1
19-2
CUT (19-2)
CUT (19-3 : VSX-AX3-S, -K ONLY)
20
21
22
23
24
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29
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31
32
33
34
35
36
37
38
39
40 W
41
Y
C
Ⓐ
Ⓑ
Ⓒ
VSX-AX5i-S ONLY
NON-CONTACT SIDE
CONTACT SIDE

FRONT PANEL SECTION parts List

Mark	No.	Description	Part No.
	1	MULTI JOG Assy	AWX8015
	2	MIC & F.OPT IN Assy	AWX7981
	3	DISPLAY Assy	See Contrast table (2)
	4	HEADPHONE Assy	AWX7980
	5	VOLUME Assy	AWX7971
	6	FRONT IN Assy	AWX8186
	7	STYLING Assy	• • • • •
	8	Door	See Contrast table (2)
	9	Spacer 45A	AEB7263
	10	Door Stay	See Contrast table (2)
	11	Door Shaft 35	AMR7295
	12	Damper Assy (200)	AXA7088
	13	Door Hinge L	See Contrast table (2)
	14	Door Hinge R	See Contrast table (2)
NSP	15	Earth Lead Wire	ADH7022
	16	Earth Plate B	ANG7412
	17	Magnet 35	AMF7007
	18	FL Sheet	See Contrast table (2)
	19-1	Panel Base	See Contrast table (2)
	19-2	Magnet Holder	
	19-3	Screw Cover	
	20	Cushion Circle	See Contrast table (2)

Mark	No.	Description	Part No.
	21	Nut	NK90FUC
	22	Rotary Knob L	See Contrast table (2)
	23	D.Sheet	See Contrast table (2)
	24	Window	See Contrast table (2)
	25	Pioneer Badge	See Contrast table (2)
	26	F.Panel	See Contrast table (2)
	27	• • • • •	
	28	J4 7P FFC/60V	ADD7352
	29	J1 32P FFC/60V	ADD7349
	30	Earth Plate A	ANG7411
NSP	31	Speed Clamp	AEC7445
	32	J1901 Connector Assy (3P)	ADE7084
	33	J15 3P FFC/60V	ADD7371
	34	J2 11P FFC/60V	ADD7350
	35	J3 4P FFC/60V	ADD7351
NSP	36	Wire Clip (A)	VEC1335
	37	Screw	BPZ30P100FMC
	38	Screw	BBZ30P080FCC
	39	Screw	ABA7009
	40	MECHA SW Assy	AWX7995
	41	Power Button	See Contrast table (2)

(2) CONTRAST TABLE

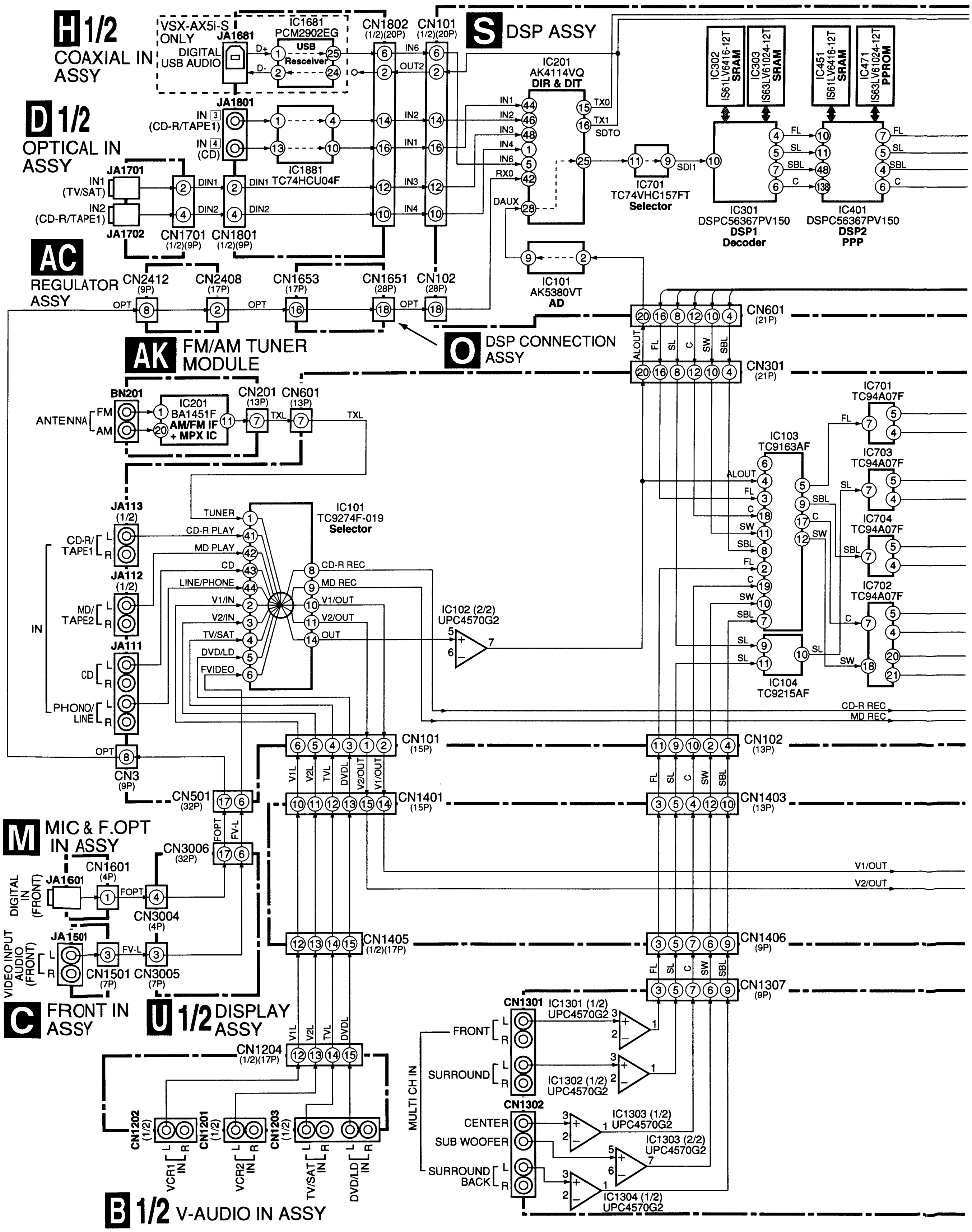
VSX-AX5i-S/HYXJI, VSX-AX3-S/HYXJI and VSX-AX3-K/HYXJI are constructed the same except for the following:

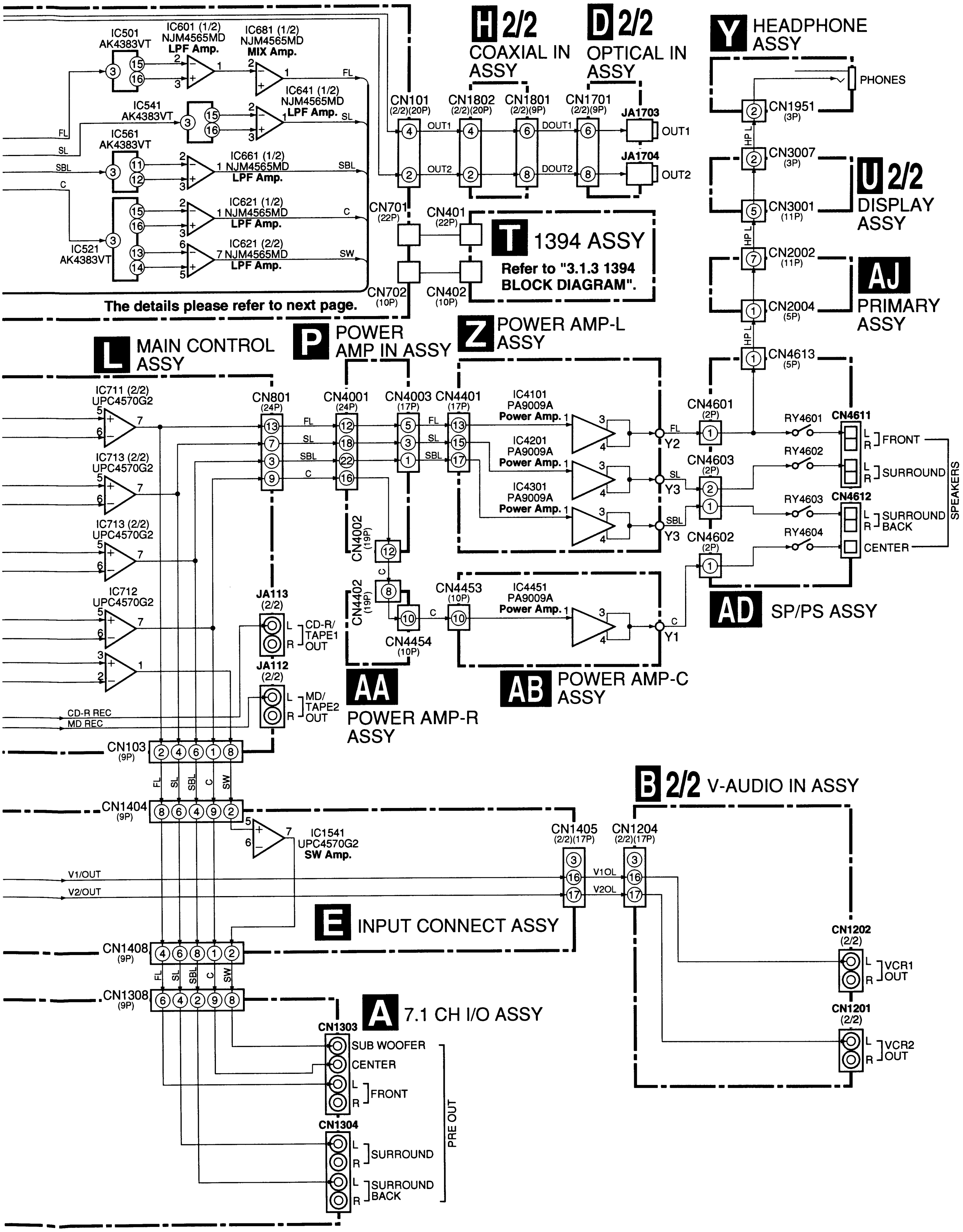
Mark	NO	Symbol and Description	VSX-AX5i-S/ HYXJI	VSX-AX3-S/HYXJI	VSX-AX3-K/HYXJI
	3	DISPLAY Assy	AWX8316	AWX8147	AWX8147
	8	Door	ANB7280	ANB7280	ANB7275
	10	Door Stay	AAH7097	AAH7097	AAH7089
	13	Door Hinge L	AMR7424	AMR7424	AMR7386
	14	Door Hinge R	AMR7425	AMR7425	AMR7387
	18	FL Sheet	AAK7956	AAK7956	Not used
	19-1	Panel Base	AMB7820	AMB7820	AMB7803
	20	Cushion Circle	AED7045	AED7045	AED7044
	22	Rotary Knob L	AAA7017	AAA7017	Not used
	22	VOL Knob	Not used	Not used	AAB7249
	23	D.Sheet	AAK8161	AAK8023	AAK8153
	24	Window	AAK8152	AAK8156	AAK8157
	25	Pioneer Badge	VAN1124	VAN1124	AAN7218
	26	F.Panel	ANB7313	ANB7317	ANB7318
	41	Power Button	AAD7675	AAD7675	AAD7647

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

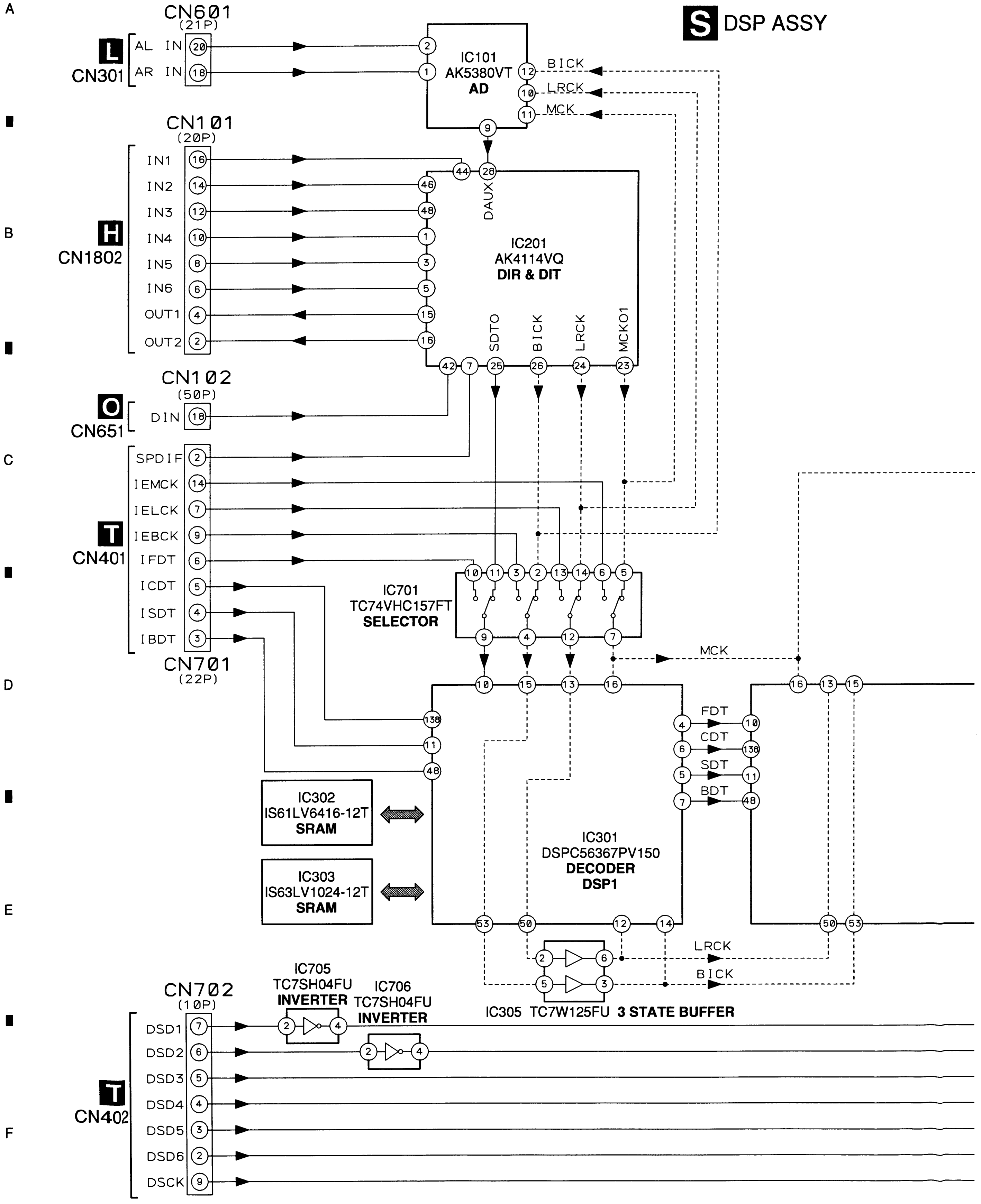
3.1 BLOCK DIAGRAM

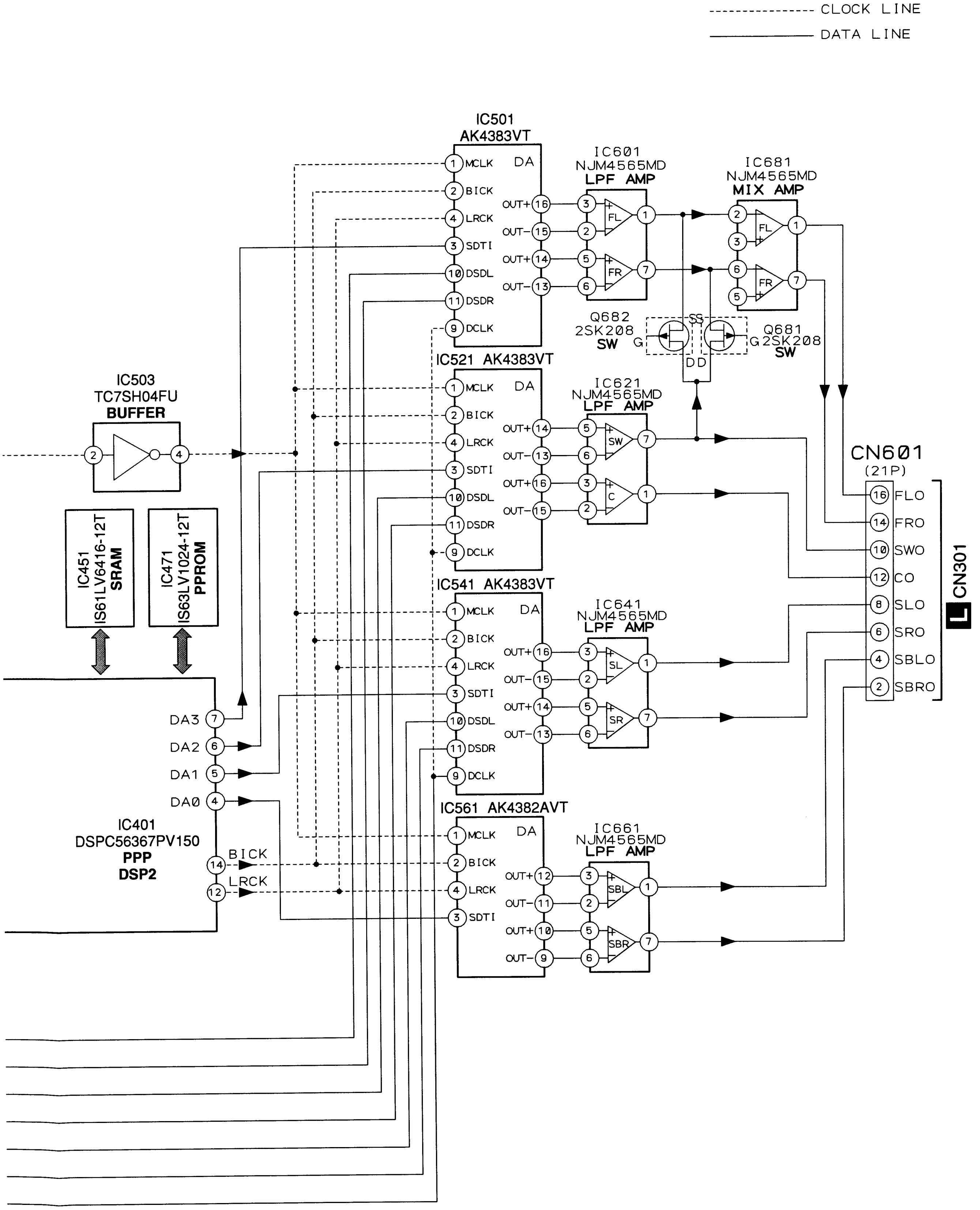
3.1.1 AUDIO BLOCK DIAGRAM


H 1/2 COAXIAL IN ASSY
VSX-AX5i-S ONLY
JA1681
DIGITAL USB AUDIO
IC1681 PCM2902EG
USB Resceiver
D+
D-
CN1802 (1/2)(20P)
CN101 (1/2)(20P)
IN6
OUT2
S DSP ASSY
D 1/2 OPTICAL IN ASSY
JA1801
IN 3 (CD-R/TAPE1)
IN 4 (CD)
IC1881 TC74HCU04F
JA1701
IN1 (TV/SAT)
IN2 (CD-R/TAPE1)
JA1702
DIN1
DIN2
CN1701 (1/2)(9P)
CN1801 (1/2)(9P)
IN2
IN1
IN3
IN4
IC201 AK4114VQ DIR & DIT
IN1 IN2 IN3 IN4 IN6 RX0 DAUX
TX0 TX1 SDTO
IC701 TC74VHC157FT Selector
SDI1
IC302 IS61LV6416-12T SRAM
IC303 IS63LV61024-12T SRAM
IC451 IS61LV6416-12T SRAM
IC471 IS63LV61024-12T PPROM
IC301 DSPC56367PV150 DSP1 Decoder
IC401 DSPC56367PV150 DSP2 PPP
FL SL SBL C
IC101 AK5380VT AD
AC REGULATOR ASSY
CN2412 (9P)
CN2408 (17P)
CN1653 (17P)
CN1651 (28P)
CN102 (28P)
OPT
CN601 (21P)
O DSP CONNECTION ASSY
ALOUT FL SL C SW SBL
CN301 (21P)
AK FM/AM TUNER MODULE
BN201
ANTENNA FM AM
IC201 BA1451F AM/FM IF + MPX IC
CN201 (13P)
CN601 (13P)
TXL
IC701 TC94A07F
IC703 TC94A07F
IC704 TC94A07F
IC702 TC94A07F
IC103 TC9163AF
IC104 TC9215AF
JA113 (1/2)
CD-R/ TAPE1 L R
JA112 (1/2)
MD/ TAPE2 L R
JA111
CD L R
PHONO/ LINE L R
IN
IC101 TC9274F-019 Selector
TUNER
CD-R PLAY
MD PLAY
CD
LINE/PHONE
V1/IN
V2/IN
TV/SAT
DVD/LD
FVIDEO
CD-R REC
MD REC
V1/OUT
V2/OUT
OUT
IC102 (2/2) UPC4570G2
CD-R REC
MD REC
CN3 (9P)
CN101 (15P)
V1L V2L TVL DVDL V2/OUT V1/OUT
CN102 (13P)
CN501 (32P)
CN1401 (15P)
CN1403 (13P)
FOPT FV-L
M MIC & F.OPT IN ASSY
CN1601 (4P)
DIGITAL IN (FRONT)
JA1601
FOPT
CN3006 (32P)
CN3004 (4P)
V1/OUT
V2/OUT
VIDEO INPUT AUDIO (FRONT)
JA1501
FV-L
CN1501 (7P)
CN3005 (7P)
CN1405 (1/2)(17P)
CN1406 (9P)
CN1307 (9P)
C FRONT IN ASSY
U 1/2 DISPLAY ASSY
CN1301
IC1301 (1/2) UPC4570G2
FRONT L R
SURROUND L R
IC1302 (1/2) UPC4570G2
MULTI CH IN
CN1302
CENTER
SUB WOOFER
SURROUND BACK L R
IC1303 (1/2) UPC4570G2
IC1303 (2/2) UPC4570G2
IC1304 (1/2) UPC4570G2
CN1204 (1/2)(17P)
CN1202 (1/2)
CN1201 (1/2)
CN1203 (1/2)
VCR1 IN L R
VCR2 IN L R
TV/SAT IN L R
DVD/LD IN L R
B 1/2 V-AUDIO IN ASSY


IC501
AK4383VT
IC601 (1/2)
NJM4565MD
LPF Amp.
IC681 (1/2)
NJM4565MD
MIX Amp.
IC641 (1/2)
NJM4565MD
LPF Amp.
IC541
AK4383VT
IC561
AK4383VT
IC661 (1/2)
NJM4565MD
LPF Amp.
IC621 (1/2)
NJM4565MD
LPF Amp.
IC621 (2/2)
NJM4565MD
LPF Amp.
IC521
AK4383VT
FL
SL
SBL
C
SW
The details please refer to next page.
H 2/2
COAXIAL IN ASSY
D 2/2
OPTICAL IN ASSY
Y HEADPHONE ASSY
PHONES
CN101 (2/2)(20P)
CN1802 (2/2)(20P)
CN1801 (2/2)(9P)
CN1701 (2/2)(9P)
OUT1
OUT2
DOUT1
DOUT2
JA1703
JA1704
OUT1
OUT2
CN1951 (3P)
CN3007 (3P)
CN3001 (11P)
CN2002 (11P)
CN2004 (5P)
CN4613 (5P)
HP L
U 2/2
DISPLAY ASSY
AJ
PRIMARY ASSY
CN701 (22P)
CN401 (22P)
CN702 (10P)
CN402 (10P)
T 1394 ASSY
Refer to "3.1.3 1394 BLOCK DIAGRAM".
L MAIN CONTROL ASSY
P POWER AMP IN ASSY
Z POWER AMP-L ASSY
IC711 (2/2)
UPC4570G2
IC713 (2/2)
UPC4570G2
IC713 (2/2)
UPC4570G2
IC712
UPC4570G2
CN801 (24P)
CN4001 (24P)
CN4003 (17P)
CN4401 (17P)
IC4101
PA9009A
Power Amp.
IC4201
PA9009A
Power Amp.
IC4301
PA9009A
Power Amp.
CN4002 (19P)
CN4402 (19P)
CN4453 (10P)
CN4454 (10P)
IC4451
PA9009A
Power Amp.
Y1 Y2 Y3
CN4601 (2P)
CN4603 (2P)
CN4602 (2P)
RY4601
RY4602
RY4603
RY4604
CN4611
CN4612
FRONT
SURROUND
SURROUND BACK
CENTER
SPEAKERS
AD SP/PS ASSY
JA113 (2/2)
CD-R/ TAPE1 OUT
JA112 (2/2)
MD/ TAPE2 OUT
CD-R REC
MD REC
AA POWER AMP-R ASSY
AB POWER AMP-C ASSY
CN103 (9P)
CN1404 (9P)
IC1541
UPC4570G2
SW Amp.
V1/OUT
V2/OUT
CN1405 (2/2)(17P)
CN1204 (2/2)(17P)
V1OL
V2OL
B 2/2 V-AUDIO IN ASSY
E INPUT CONNECT ASSY
CN1408 (9P)
CN1308 (9P)
CN1202 (2/2)
VCR1 OUT
CN1201 (2/2)
VCR2 OUT
A 7.1 CH I/O ASSY
CN1303
SUB WOOFER
CENTER
FRONT
CN1304
SURROUND
SURROUND BACK
PRE OUT
L
R

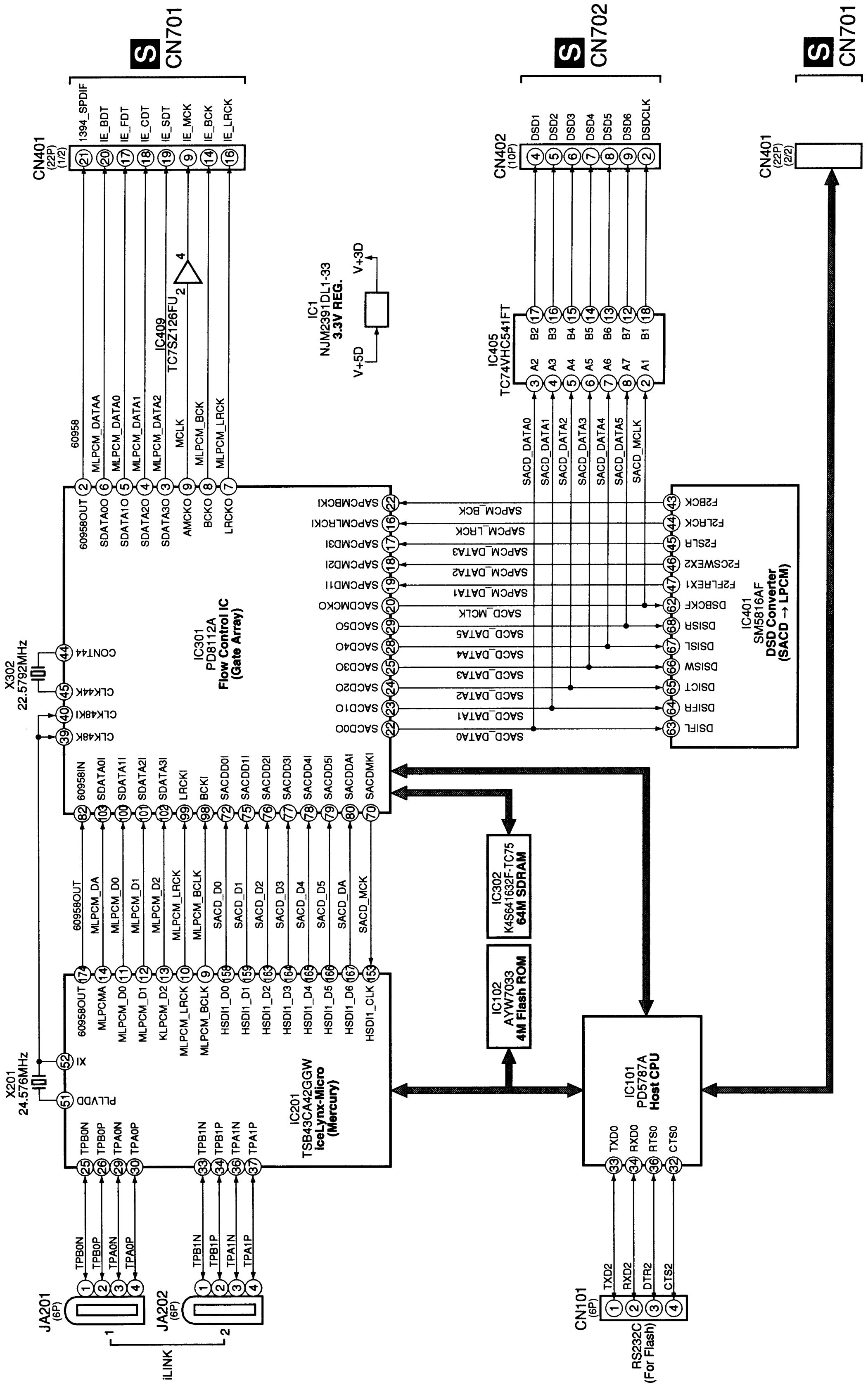
3.1.2 DSP BLOCK DIAGRAM


A
B
C
D
E
F
S DSP ASSY
CN601
(21P)
L
CN301
AL IN 20
AR IN 18
IC101
AK5380VT
AD
2
1
12
10
11
9
BICK
LRCK
MCK
CN101
(20P)
H
CN1802
IN1 16
IN2 14
IN3 12
IN4 10
IN5 8
IN6 6
OUT1 4
OUT2 2
44
28
DAUX
46
48
1
3
5
15
16
IC201
AK4114VQ
DIR & DIT
SDTO
BICK
LRCK
MCKO1
42
7
25
26
24
23
CN102
(50P)
O
CN651
DIN 18
T
CN401
SPDIF 2
IEMCK 14
IELCK 7
IEBCK 9
IFDT 6
ICDT 5
ISDT 4
IBDT 3
CN701
(22P)
IC701
TC74VHC157FT
SELECTOR
10
11
3
2
13
14
6
5
9
4
12
7
MCK
10
15
13
16
138
11
48
IC302
IS61LV6416-12T
SRAM
IC303
IS63LV1024-12T
SRAM
IC301
DSPC56367PV150
DECODER
DSP1
4
6
5
7
FDT
CDT
SDT
BDT
10
138
11
48
16
13
15
53
50
12
14
50
53
2
6
5
3
LRCK
BICK
IC305 TC7W125FU 3 STATE BUFFER
CN702
(10P)
T
CN402
DSD1 7
DSD2 6
DSD3 5
DSD4 4
DSD5 3
DSD6 2
DSCK 9
IC705
TC7SH04FU
INVERTER
IC706
TC7SH04FU
INVERTER
2
4
2
4


CLOCK LINE
DATA LINE
IC501
AK4383VT
DA
MCLK
BICK
LRCK
SDTI
DSDL
DSDR
DCLK
OUT+
OUT−
IC601
NJM4565MD
LPF AMP
FL
FR
IC681
NJM4565MD
MIX AMP
Q682
2SK208
SW
Q681
2SK208
SW
G
S
D
IC521 AK4383VT
IC621
NJM4565MD
LPF AMP
SW
C
IC503
TC7SH04FU
BUFFER
IC451
IS61LV6416-12T
SRAM
IC471
IS63LV1024-12T
PPROM
IC541 AK4383VT
IC641
NJM4565MD
LPF AMP
SL
SR
IC561 AK4382AVT
IC661
NJM4565MD
LPF AMP
SBL
SBR
DA3
DA2
DA1
DA0
IC401
DSPC56367PV150
PPP
DSP2
BICK
LRCK
CN601
(21P)
FLO
FRO
SWO
CO
SLO
SRO
SBLO
SBRO
CN301
L

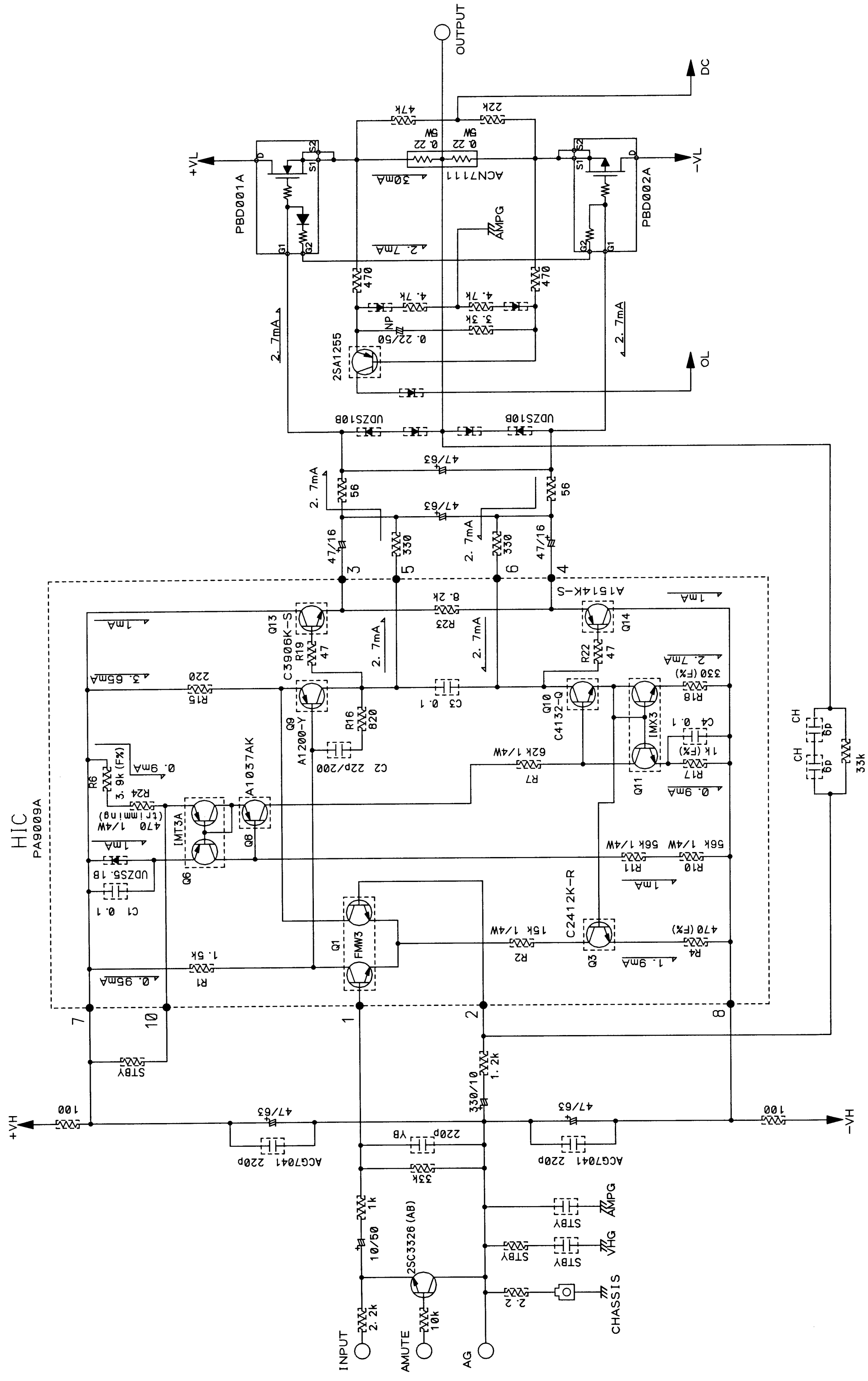
3.1.3 1394 BLOCK DIAGRAM

T 1394 ASSY

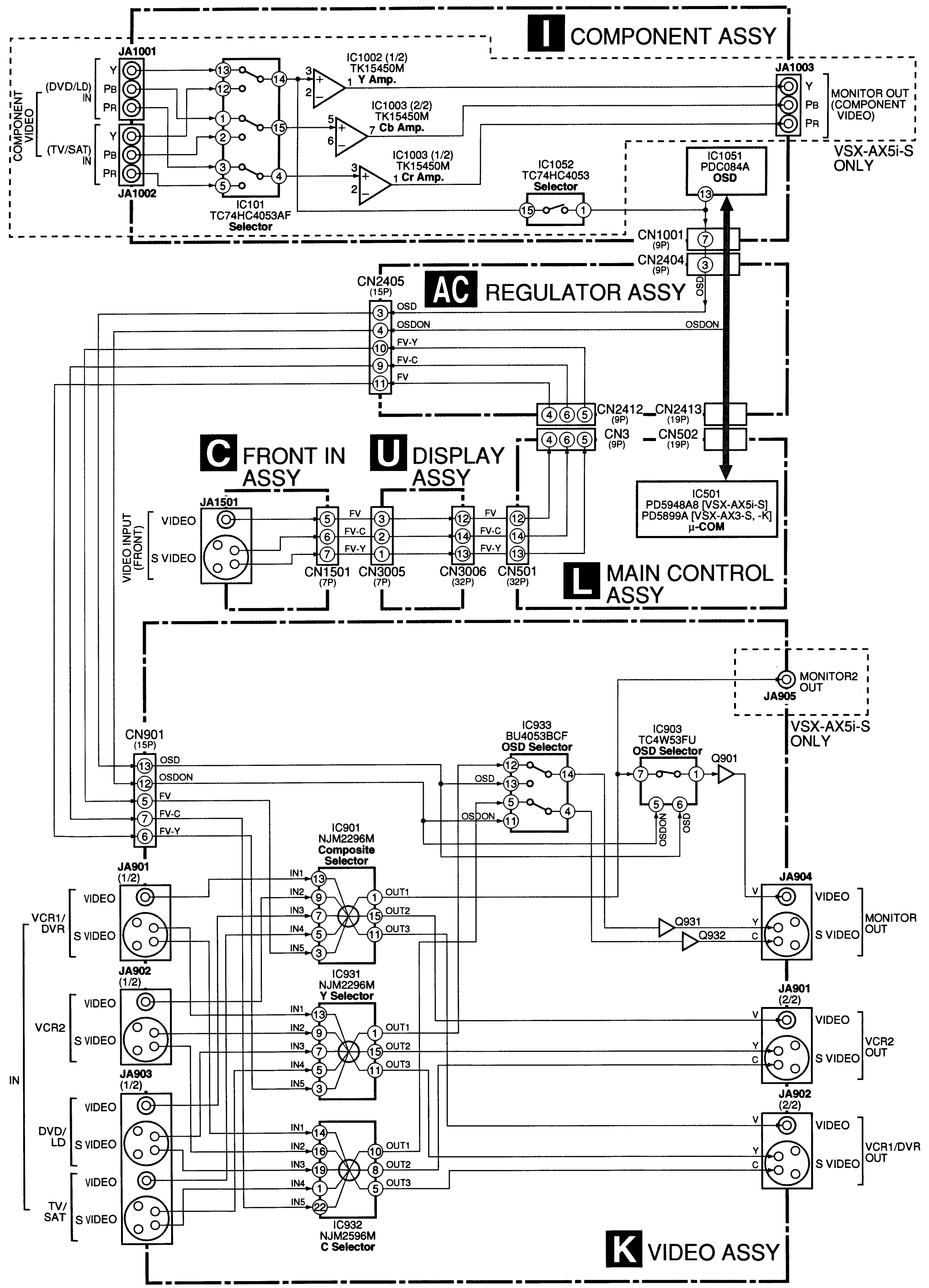


S CN701
S CN702
S CN701
CN401 (22P) (1/2)
1394_SPDIF
IE_BDT
IE_FDT
IE_CDT
IE_SDT
IE_MCK
IE_BCK
IE_LRCK
CN402 (10P)
DSD1
DSD2
DSD3
DSD4
DSD5
DSD6
DSDCLK
CN401 (22P) (2/2)
IC409 TC7SZ126FU
IC1 NJM2391DL1-33 3.3V REG.
V+5D
V+3D
IC405 TC74VHC541FT
60958
MLPCM_DATAA
MLPCM_DATA0
MLPCM_DATA1
MLPCM_DATA2
MCLK
MLPCM_BCK
MLPCM_LRCK
SACD_DATA0
SACD_DATA1
SACD_DATA2
SACD_DATA3
SACD_DATA4
SACD_DATA5
SACD_MCLK
IC301 PD8112A Flow Control IC (Gate Array)
60958OUT
SDATA0O
SDATA1O
SDATA2O
SDATA3O
AMCKO
BCKO
LRCKO
CONT44
CLK44K
CLK48KI
CLK48K
X302 22.5792MHz
SAPCMBCKI
SAPCMLRCKI
SAPCMD3I
SAPCMD2I
SAPCMD1I
SACDMCKO
SACD5O
SACD4O
SACD3O
SACD2O
SACD1O
SACD0O
SAPCM_BCK
SAPCM_LRCK
SAPCM_DATA3
SAPCM_DATA2
SAPCM_DATA1
SACD_MCLK
SACD_DATA5
SACD_DATA4
SACD_DATA3
SACD_DATA2
SACD_DATA1
SACD_DATA0
IC401 SM5816AF DSD Converter (SACD → LPCM)
F2BCK
F2LRCK
F2SLR
F2CSWEX2
F2FLREX1
DSBCKF
DSISR
DSISL
DSISW
DSICT
DSIFR
DSIFL
60958IN
SDATA0I
SDATA1I
SDATA2I
SDATA3I
LRCKI
BCKI
SACDD0I
SACDD1I
SACDD2I
SACDD3I
SACDD4I
SACDD5I
SACDDAI
SACDMKI
60958OUT
MLPCM_DA
MLPCM_D0
MLPCM_D1
MLPCM_D2
MLPCM_LRCK
MLPCM_BCLK
SACD_D0
SACD_D1
SACD_D2
SACD_D3
SACD_D4
SACD_D5
SACD_DA
SACD_MCK
IC302 K4S641632F-TC75 64M SDRAM
IC102 AYW7033 4M Flash ROM
IC201 TSB43CA42GGW iceLynx-Micro (Mercury)
60958OUT
MLPCMA
MLPCM_D0
MLPCM_D1
KLPCM_D2
MLPCM_LRCK
MLPCM_BCLK
HSDI1_D0
HSDI1_D1
HSDI1_D2
HSDI1_D3
HSDI1_D4
HSDI1_D5
HSDI1_D6
HSDI1_CLK
XI
PLLVDD
X201 24.576MHz
TPB0N
TPB0P
TPA0N
TPA0P
TPB1N
TPB1P
TPA1N
TPA1P
IC101 PD5787A Host CPU
TXD0
RXD0
RTS0
CTS0
TXD2
RXD2
DTR2
CTS2
CN101 (6P)
RS232C (For Flash)
JA201 (6P)
JA202 (6P)
iLINK

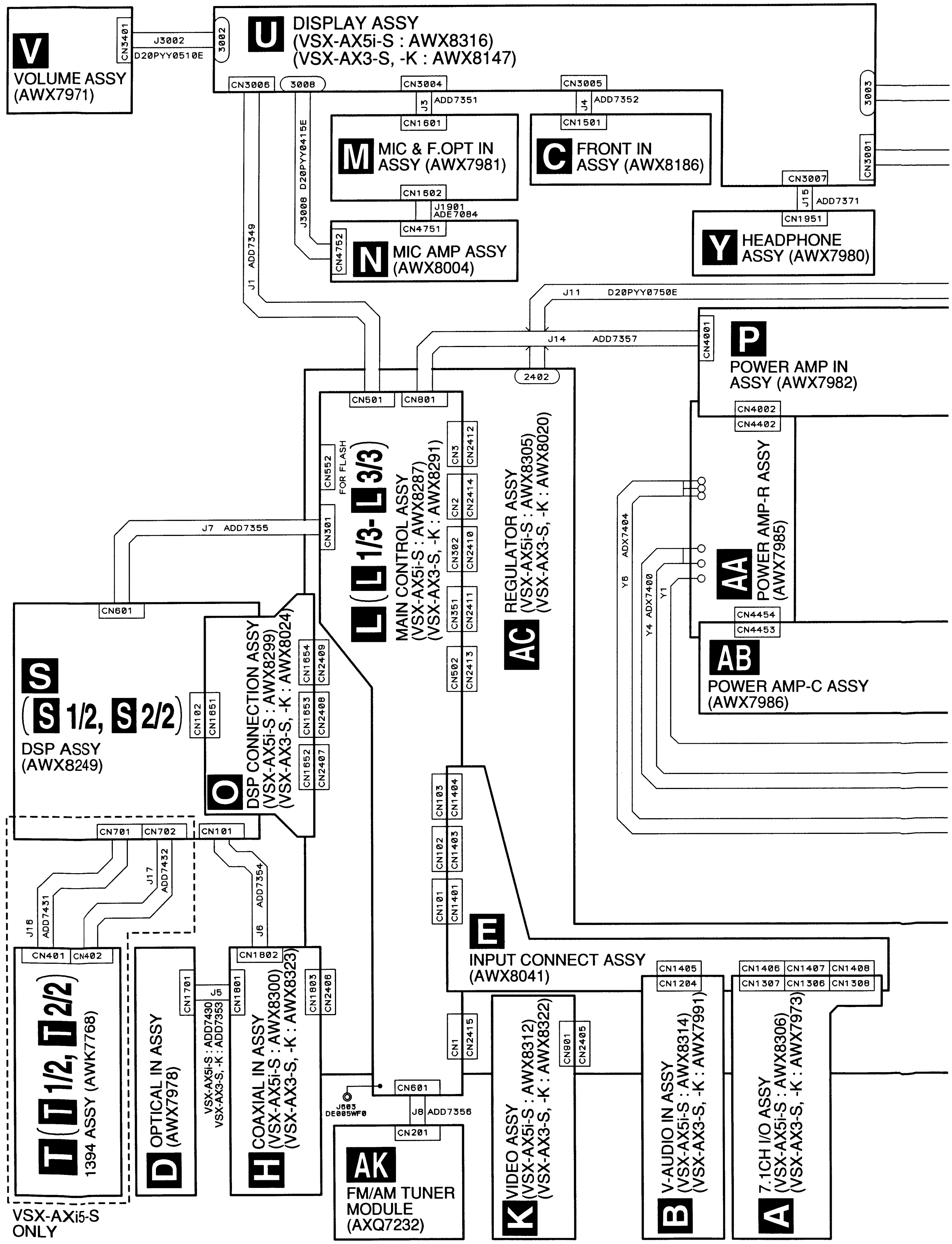
3.1.4 POWER AMP BLOCK DIAGRAM


OUTPUT
DC
47k
22k
0.22 5W
0.22 5W
ACN7111
30mA
+VL
-VL
PBD001A
PBD002A
S1
S2
D
G1
G2
AMPG
2.7mA
470
4.7k
3.3k
NP
0.22/50
2SA1255
OL
UDZS10B
47/63
56
330
47/16
3
5
6
4
HIC
PA9009A
Q13
C3906K-S
R19
47
R23
8.2k
A1514K-S
Q14
R22
1mA
3.65mA
R15
220
Q9
A1200-Y
R16
820
C3 0.1
Q10
C4132-Q
IMX3
R18
330 (F%)
C4 0.1
R17
1k (F%)
Q11
C2 22p/200
R7
62k 1/4W
A1037AK
Q8
IMT3A
Q6
R6
3.9k (F%)
R24
470 1/4W
(trimming)
0.9mA
UDZS5.1B
C1 0.1
R11
56k 1/4W
R10
56k 1/4W
C2412K-R
Q3
R2
15k 1/4W
R4
470 (F%)
1.9mA
Q1
FMW3
R1
1.5k
0.95mA
7
10
1
2
8
CH
6p
33k
STBY
+VH
-VH
100
ACG7041 220p
330/10
1.2k
220p YB
1k
10/50
2SC3326 (AB)
2.2k
10k
INPUT
AMUTE
AG
VHG
2.2
CHASSIS

3.1.5 VIDEO BLOCK DIAGRAM

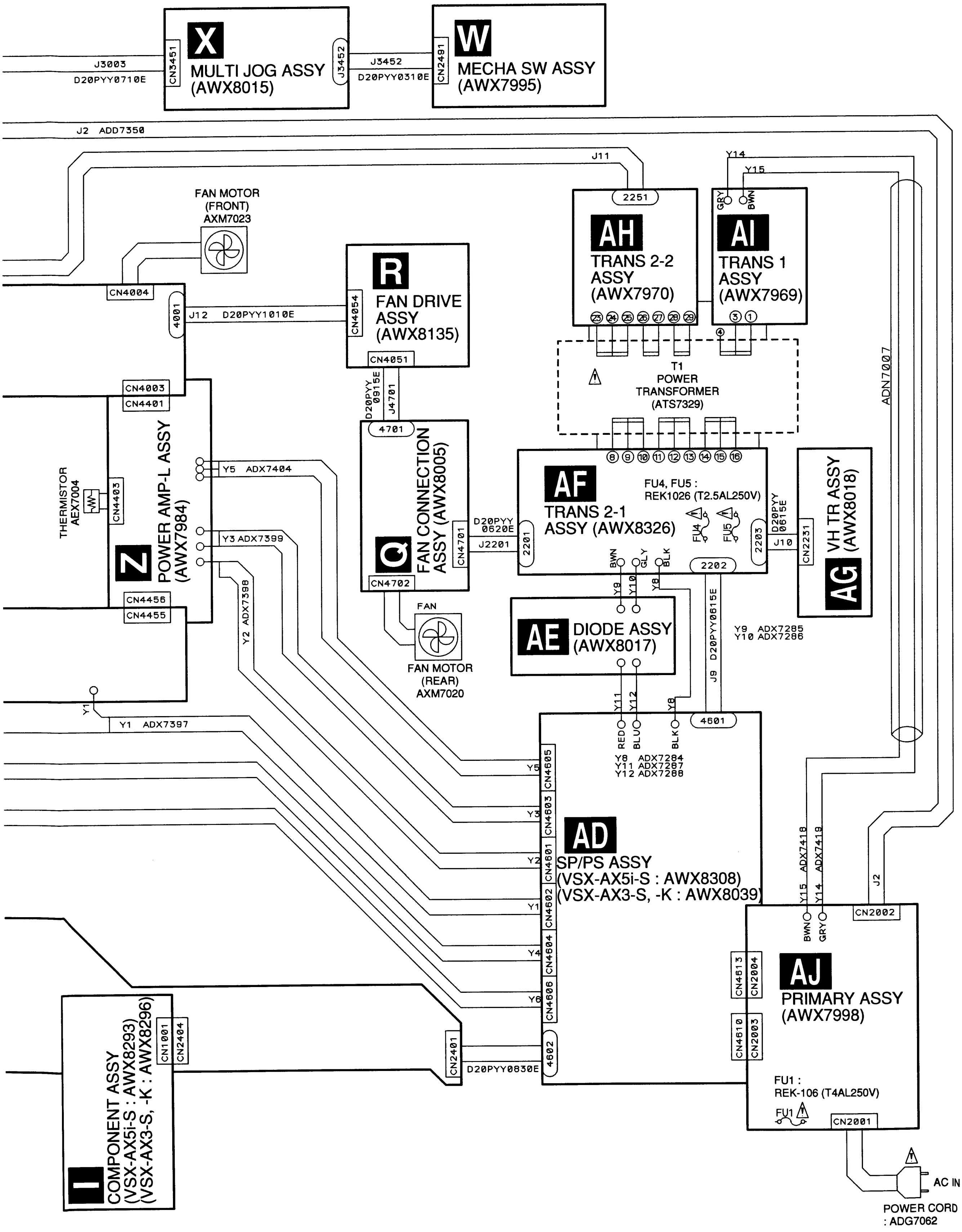

A
B
C
D
E
F
I COMPONENT ASSY
JA1001
COMPONENT VIDEO
(DVD/LD) IN
Y
PB
PR
(TV/SAT) IN
JA1002
IC101
TC74HC4053AF
Selector
IC1002 (1/2)
TK15450M
Y Amp.
IC1003 (2/2)
TK15450M
Cb Amp.
IC1003 (1/2)
TK15450M
Cr Amp.
IC1052
TC74HC4053
Selector
IC1051
PDC084A
OSD
JA1003
MONITOR OUT (COMPONENT VIDEO)
VSX-AX5i-S ONLY
CN1001 (9P)
CN2404 (9P)
OSD
AC REGULATOR ASSY
CN2405 (15P)
OSD
OSDON
FV-Y
FV-C
FV
CN2412 (9P)
CN2413 (19P)
CN3 (9P)
CN502 (19P)
C FRONT IN ASSY
U DISPLAY ASSY
JA1501
VIDEO INPUT (FRONT)
VIDEO
S VIDEO
CN1501 (7P)
CN3005 (7P)
CN3006 (32P)
CN501 (32P)
IC501
PD5948A8 [VSX-AX5i-S]
PD5899A [VSX-AX3-S, -K]
μ-COM
L MAIN CONTROL ASSY
MONITOR2 OUT
JA905
VSX-AX5i-S ONLY
CN901 (15P)
IC933
BU4053BCF
OSD Selector
IC903
TC4W53FU
OSD Selector
Q901
OSDON
IC901
NJM2296M
Composite Selector
IN1
IN2
IN3
IN4
IN5
OUT1
OUT2
OUT3
IC931
NJM2296M
Y Selector
IC932
NJM2596M
C Selector
Q931
Q932
JA901 (1/2)
VCR1/ DVR
JA902 (1/2)
VCR2
JA903 (1/2)
DVD/ LD
TV/ SAT
IN
JA904
MONITOR OUT
JA901 (2/2)
VCR2 OUT
JA902 (2/2)
VCR1/DVR OUT
V
Y
C
K VIDEO ASSY

3.2 OVERALL WIRING DIAGRAM



V
VOLUME ASSY
(AWX7971)
CN3401
J3002
D20PYY0510E
3002
U
DISPLAY ASSY
(VSX-AX5i-S : AWX8316)
(VSX-AX3-S, -K : AWX8147)
CN3006
3008
CN3004
CN3005
3003
CN3001
CN3007
J3 ADD7351
J4 ADD7352
CN1601
CN1501
M
MIC & F.OPT IN
ASSY (AWX7981)
C
FRONT IN
ASSY (AWX8186)
CN1602
J1901
ADE7084
J3008 D20PYY0415E
CN4751
CN4752
N
MIC AMP ASSY
(AWX8004)
J15 ADD7371
CN1951
Y
HEADPHONE
ASSY (AWX7980)
J1 ADD7349
J11 D20PYY0750E
J14 ADD7357
CN4001
P
POWER AMP IN
ASSY (AWX7982)
CN4002
CN4402
2402
CN501
CN801
CN552
FOR FLASH
CN301
L
(L 1/3- L 3/3)
MAIN CONTROL ASSY
(VSX-AX5i-S : AWX8287)
(VSX-AX3-S, -K : AWX8291)
CN3
CN2412
CN2
CN2414
CN302
CN2410
CN351
CN2411
CN502
CN2413
AC
REGULATOR ASSY
(VSX-AX5i-S : AWX8305)
(VSX-AX3-S, -K : AWX8020)
ADX7404
Y6
Y4 ADX7400
Y1
AA
POWER AMP-R ASSY
(AWX7985)
CN4454
CN4453
AB
POWER AMP-C ASSY
(AWX7986)
J7 ADD7355
CN601
S
(S 1/2, S 2/2)
DSP ASSY
(AWX8249)
CN102
CN1651
O
DSP CONNECTION ASSY
(VSX-AX5i-S : AWX8299)
(VSX-AX3-S, -K : AWX8024)
CN1654
CN2409
CN1653
CN2408
CN1652
CN2407
CN103
CN1404
CN102
CN1403
CN101
CN1401
CN701
CN702
CN101
J16 ADD7431
J17 ADD7432
J6 ADD7354
E
INPUT CONNECT ASSY
(AWX8041)
CN1405
CN1204
CN1406
CN1407
CN1408
CN1307
CN1306
CN1308
CN401
CN402
T
(T 1/2, T 2/2)
1394 ASSY (AWK7768)
CN1701
J5
VSX-AX5i-S : ADD7430
VSX-AX3-S, -K : ADD7353
D
OPTICAL IN ASSY
(AWX7978)
CN1802
CN1801
CN1803
CN2406
H
COAXIAL IN ASSY
(VSX-AX5i-S : AWX8300)
(VSX-AX3-S, -K : AWX8323)
CN1
CN2415
CN601
J603
DE005WF0
J8 ADD7356
CN201
AK
FM/AM TUNER
MODULE
(AXQ7232)
CN901
CN2405
K
VIDEO ASSY
(VSX-AX5i-S : AWX8312)
(VSX-AX3-S, -K : AWX8322)
B
V-AUDIO IN ASSY
(VSX-AX5i-S : AWX8314)
(VSX-AX3-S, -K : AWX7991)
A
7.1CH I/O ASSY
(VSX-AX5i-S : AWX8306)
(VSX-AX3-S, -K : AWX7973)
VSX-AXi5-S
ONLY

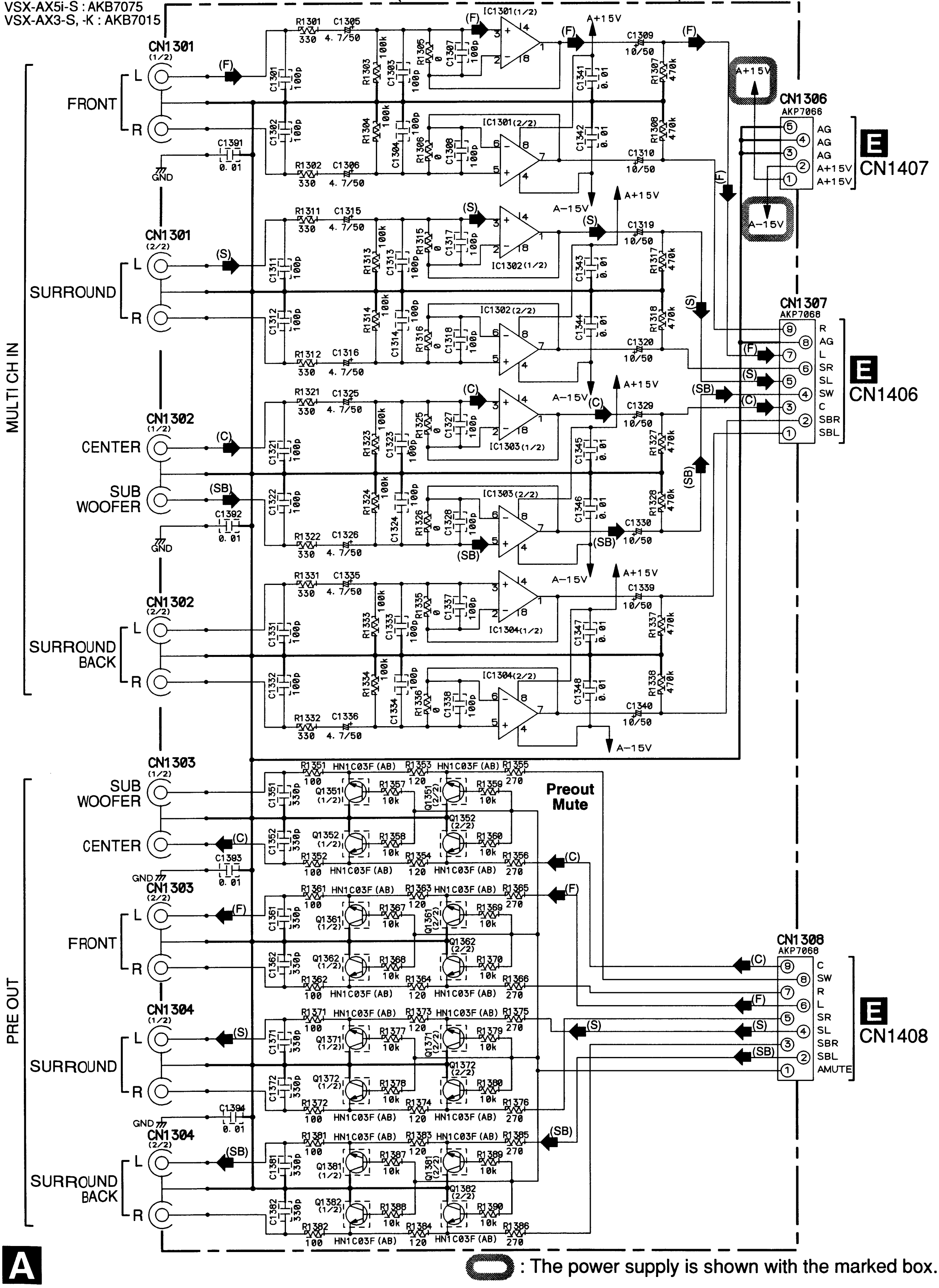
Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".


X
MULTI JOG ASSY
(AWX8015)
CN3451
J3452
J3003
D20PYY0710E
J3452
D20PYY0310E
CN2491
W
MECHA SW ASSY
(AWX7995)
J2 ADD7350
J11
Y14
Y15
FAN MOTOR
(FRONT)
AXM7023
CN4004
4001
J12 D20PYY1010E
CN4054
R
FAN DRIVE
ASSY
(AWX8135)
CN4051
D20PYY
0915E
J4701
2251
AH
TRANS 2-2
ASSY
(AWX7970)
㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙
GRY
BWN
AI
TRANS 1
ASSY
(AWX7969)
③ ①
④
T1
POWER
TRANSFORMER
(ATS7329)
ADN7007
CN4003
CN4401
THERMISTOR
AEX7004
CN4403
Z
POWER AMP-L ASSY
(AWX7984)
Y5 ADX7404
Y3 ADX7399
Y2 ADX7398
CN4456
CN4455
Y1
Y1 ADX7397
4701
Q
FAN CONNECTION
ASSY (AWX8005)
CN4701
CN4702
FAN
FAN MOTOR
(REAR)
AXM7020
D20PYY
0620E
J2201
2201
⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯
AF
TRANS 2-1
ASSY (AWX8326)
FU4, FU5 :
REK1026 (T2.5AL250V)
FU4
FU5
2203
D20PYY
0615E
J10
CN2231
AG
VH TR ASSY
(AWX8018)
BWN
GLY
BLK
Y9
Y10
Y8
2202
J9 D20PYY0615E
Y9 ADX7285
Y10 ADX7286
AE
DIODE ASSY
(AWX8017)
Y11
Y12
Y8
RED
BLU
BLK
4601
Y8 ADX7284
Y11 ADX7287
Y12 ADX7288
Y5
CN4605
Y3
CN4603
Y2
CN4601
Y1
CN4602
Y4
CN4604
Y6
CN4606
4602
AD
SP/PS ASSY
(VSX-AX5i-S : AWX8308)
(VSX-AX3-S, -K : AWX8039)
CN2401
D20PYY0830E
I
COMPONENT ASSY
(VSX-AX5i-S : AWX8293)
(VSX-AX3-S, -K : AWX8296)
CN1001
CN2404
Y15 ADX7418
Y14 ADX7419
J2
BWN
GRY
CN2002
AJ
PRIMARY ASSY
(AWX7998)
CN4613
CN2004
CN4610
CN2003
FU1 :
REK-106 (T4AL250V)
FU1
CN2001
AC IN
POWER CORD
: ADG7062

3.3 7.1 CH I/O, V-AUDIO, FRONT IN and OPTICAL IN ASSYS

A 7.1 CH I/O ASSY (VSX-AX5i-S : AWX8306)
(VSX-AX3-S, -K : AWX7973)

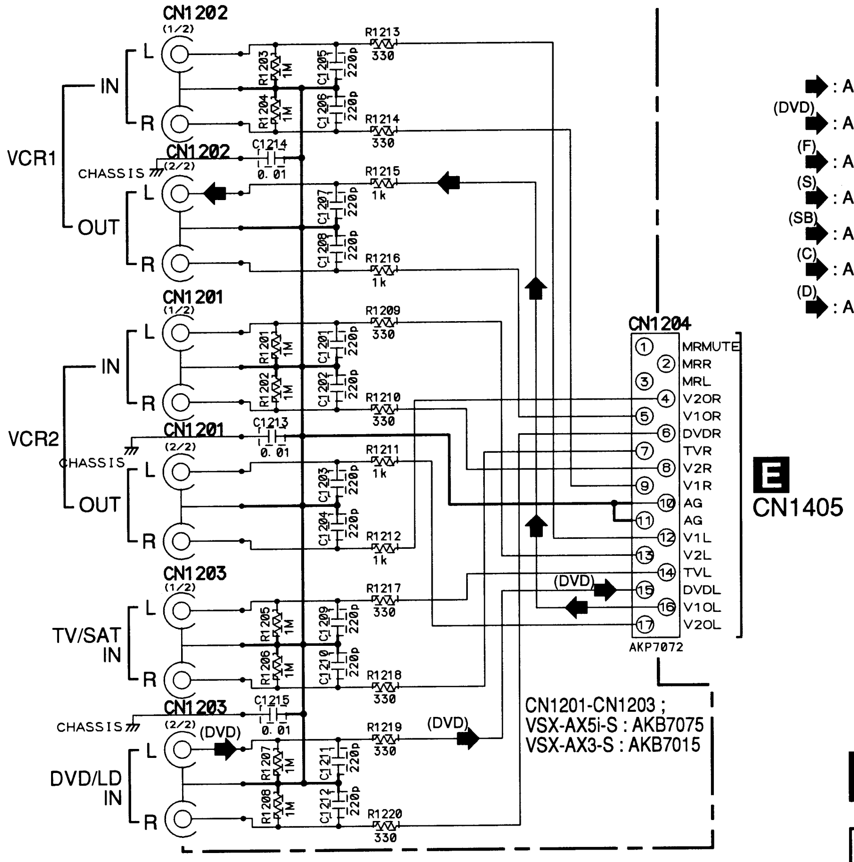
CN1301-CN1304 ;
VSX-AX5i-S : AKB7075
VSX-AX3-S, -K : AKB7015


CN1301 (1/2)
FRONT
L
R
CN1301 (2/2)
SURROUND
CN1302 (1/2)
CENTER
SUB WOOFER
CN1302 (2/2)
SURROUND BACK
MULTI CH IN
CN1303 (1/2)
CN1303 (2/2)
CN1304 (1/2)
CN1304 (2/2)
PRE OUT
GND
C1391 0.01
C1392 0.01
C1393 0.01
C1394 0.01
IC1301 (1/2)
IC1301 (2/2)
IC1302 (1/2)
IC1302 (2/2)
IC1303 (1/2)
IC1303 (2/2)
IC1304 (1/2)
IC1304 (2/2)
R1301 330
C1305 4.7/50
R1303 100k
R1305 0
C1307 100p
C1309 10/50
R1307 470k
C1341 0.01
A+15V
A-15V
(F)
(S)
(C)
(SB)
CN1306 AKP7066
AG
A+15V
CN1407
CN1307 AKP7068
R
AG
L
SR
SL
SW
C
SBR
SBL
CN1406
CN1308 AKP7068
AMUTE
CN1408
E
Preout Mute
HN1C03F (AB)
Q1351 (1/2)
Q1351 (2/2)
Q1352 (1/2)
Q1352 (2/2)
Q1361
Q1362
Q1371
Q1372
Q1381
Q1382
R1351 100
R1353 120
R1355 270
R1357 10k
R1359 10k
C1351 330p

A

: The power supply is shown with the marked box.

B V-AUDIO ASSY
(VSX-AX5i-S : AWX8314)
(VSX-AX3-S, -K : AWX7991)


CN1202 (1/2)
IN
L
R
R1203 1M
C1205 220p
R1213 330
R1204 1M
C1206 220p
R1214 330
VCR1
CHASSIS
CN1202 (2/2)
C1214 0.01
OUT
L
R
C1207 220p
R1215 1k
C1208 220p
R1216 1k
CN1201 (1/2)
R1201 1M
C1201 220p
R1209 330
R1202 1M
C1202 220p
R1210 330
VCR2
CHASSIS
CN1201 (2/2)
C1213 0.01
C1203 220p
R1211 1k
C1204 220p
R1212 1k
CN1203 (1/2)
TV/SAT IN
R1205 1M
C1209 220p
R1217 330
R1206 1M
C1210 220p
R1218 330
CN1203 (2/2)
C1215 0.01
(DVD)
DVD/LD IN
R1207 1M
C1211 220p
R1219 330
R1208 1M
C1212 220p
R1220 330
CN1204
① MRMUTE
② MRR
③ MRL
④ V2OR
⑤ V1OR
⑥ DVDR
⑦ TVR
⑧ V2R
⑨ V1R
⑩ AG
⑪ AG
⑫ V1L
⑬ V2L
⑭ TVL
⑮ DVDL
⑯ V1OL
⑰ V2OL
AKP7072
E
CN1405
CN1201-CN1203 ;
VSX-AX5i-S : AKB7075
VSX-AX3-S : AKB7015

➡ : AUDIO SIGNAL ROUTE (Lch)

(DVD) ➡ : AUDIO SIGNAL ROUTE (DVD Lch)

(F) ➡ : AUDIO SIGNAL ROUTE (FRONT Lch)

(S) ➡ : AUDIO SIGNAL ROUTE (SURROUND Lch)

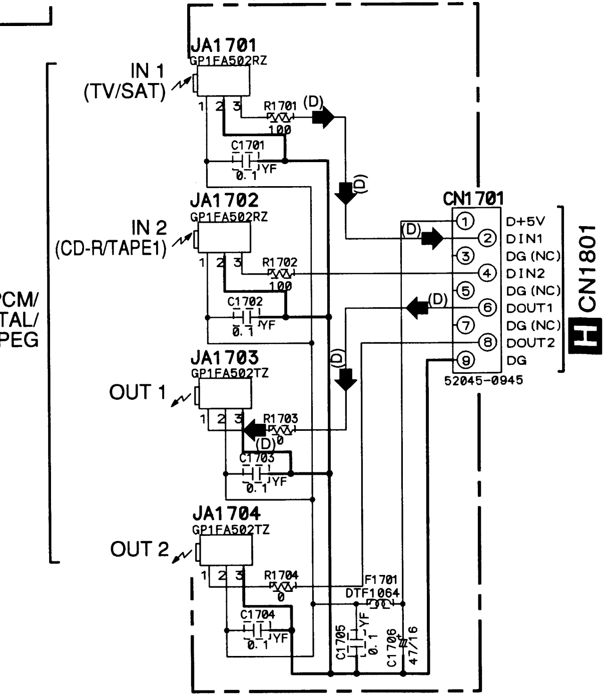
(SB) ➡ : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)

(C) ➡ : AUDIO SIGNAL ROUTE (CENTER ch)

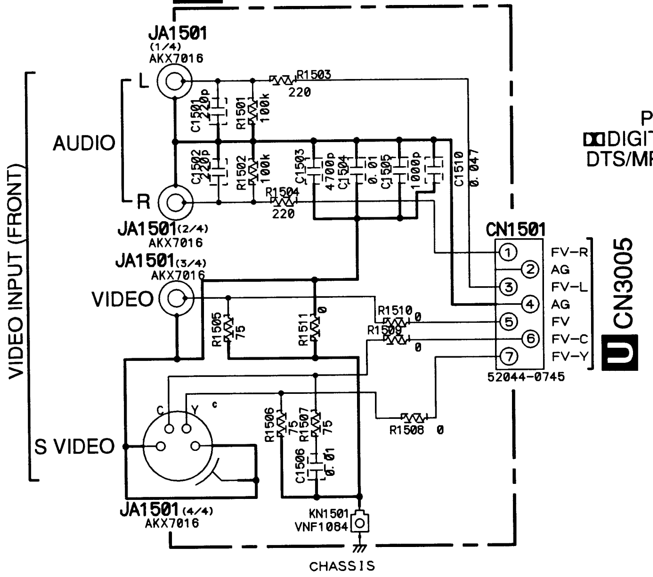
(D) ➡ : AUDIO SIGNAL ROUTE (DIGITAL)

D OPTICAL IN ASSY
(AWX7978)

PCM/
DIGITAL/
DTS/MPEG

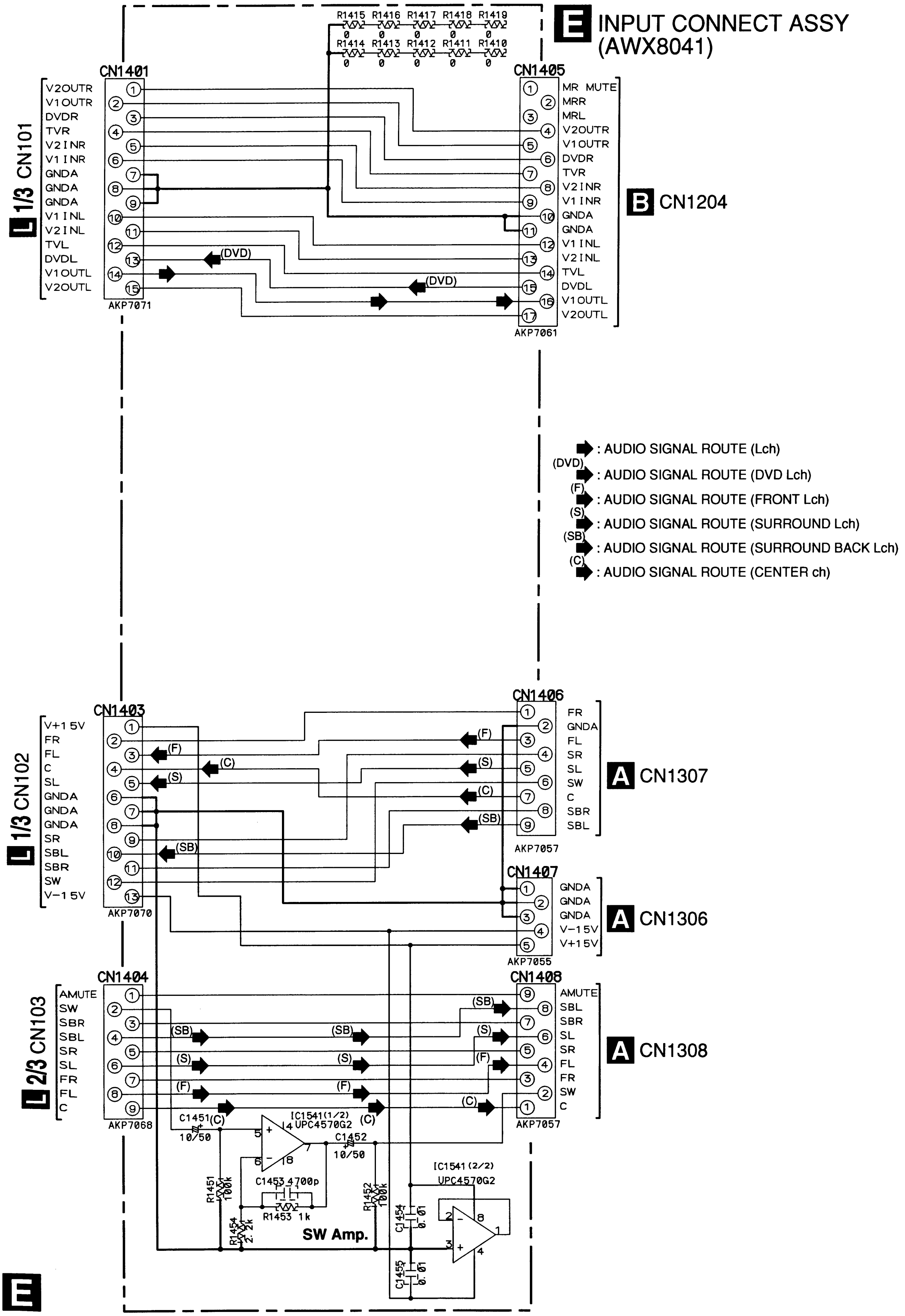

IN 1
(TV/SAT)
JA1701
GP1FA502RZ
1 2 3
R1701 100
(D)
C1701 0.1 YF
IN 2
(CD-R/TAPE1)
JA1702
GP1FA502RZ
R1702 100
C1702 0.1 YF
OUT 1
JA1703
GP1FA502TZ
R1703 0
C1703 0.1 YF
OUT 2
JA1704
GP1FA502TZ
R1704 0
C1704 0.1 YF
F1701
DTF1064
C1705 0.1 YF
C1706 47/16
CN1701
① D+5V
② DIN1
③ DG (NC)
④ DIN2
⑤ DG (NC)
⑥ DOUT1
⑦ DG (NC)
⑧ DOUT2
⑨ DG
52045-0945
H
CN1801

C FRONT IN ASSY (AWX8186)


VIDEO INPUT (FRONT)
AUDIO
L
R
JA1501 (1/4) AKX7016
R1503 220
C1501 220p
R1501 100k
C1502 220p
R1502 100k
R1504 220
C1503 4700p
C1504 0.01
C1505 1000p
C1510 0.047
JA1501 (2/4) AKX7016
JA1501 (3/4) AKX7016
VIDEO
R1505 75
R1511 0
R1510 0
R1509 0
S VIDEO
C
Y
R1506 75
R1507 75
C1506 0.01
R1508 0
JA1501 (4/4) AKX7016
KN1501 VNF1084
CHASSIS
CN1501
① FV-R
② AG
③ FV-L
④ AG
⑤ FV
⑥ FV-C
⑦ FV-Y
52044-0745
U
CN3005

B C D

3.4 INPUT CONNECT ASSY


E INPUT CONNECT ASSY
(AWX8041)
R1415 R1416 R1417 R1418 R1419
0 0 0 0 0
R1414 R1413 R1412 R1411 R1410
0 0 0 0 0
CN1401
L 1/3 CN101
V2OUTR
V1OUTR
DVDR
TVR
V2INR
V1INR
GNDA
GNDA
GNDA
V1INL
V2INL
TVL
DVDL
V1OUTL
V2OUTL
AKP7071
(DVD)
(DVD)
CN1405
MR MUTE
MRR
MRL
V2OUTR
V1OUTR
DVDR
TVR
V2INR
V1INR
GNDA
GNDA
V1INL
V2INL
TVL
DVDL
V1OUTL
V2OUTL
AKP7061
B CN1204
CN1403
L 1/3 CN102
V+15V
FR
FL
C
SL
GNDA
GNDA
GNDA
SR
SBL
SBR
SW
V-15V
AKP7070
(F)
(C)
(S)
(SB)
CN1406
FR
GNDA
FL
SR
SL
SW
C
SBR
SBL
AKP7057
A CN1307
CN1407
GNDA
GNDA
GNDA
V-15V
V+15V
AKP7055
A CN1306
CN1404
L 2/3 CN103
AMUTE
SW
SBR
SBL
SR
SL
FR
FL
C
AKP7068
(SB)
(S)
(F)
(C)
CN1408
AMUTE
SBL
SBR
SL
SR
FL
FR
SW
C
AKP7057
A CN1308
C1451 (C)
10/50
IC1541 (1/2)
UPC4570G2
C1452
10/50
C1453 4700p
R1453 1k
R1451 100k
R1452 100k
R1454 2.2k
SW Amp.
IC1541 (2/2)
UPC4570G2
C1454 0.01
C1455 0.01

➡ : AUDIO SIGNAL ROUTE (Lch)

(DVD) ➡ : AUDIO SIGNAL ROUTE (DVD Lch)

(F) ➡ : AUDIO SIGNAL ROUTE (FRONT Lch)

(S) ➡ : AUDIO SIGNAL ROUTE (SURROUND Lch)

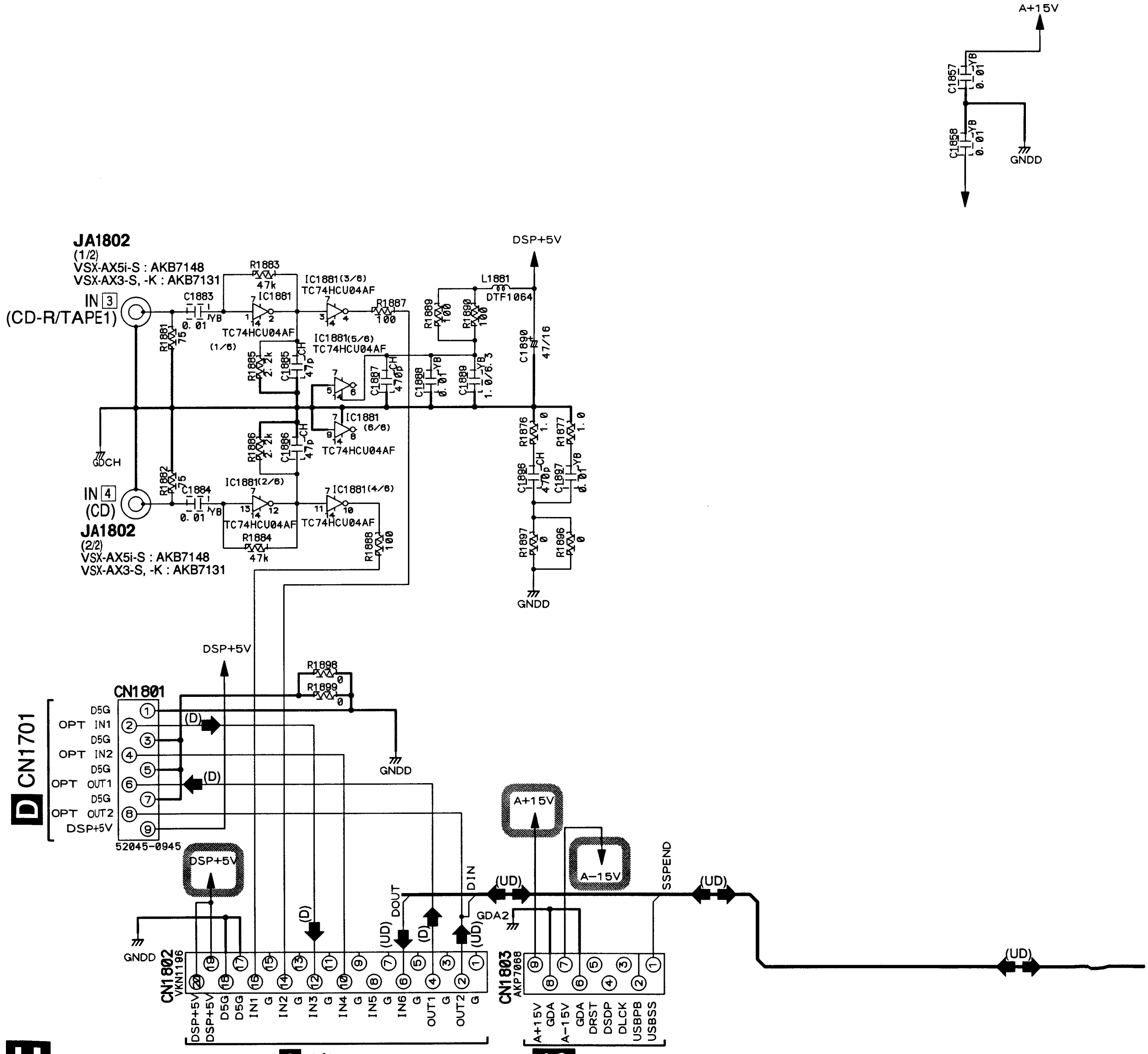
(SB) ➡ : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)

(C) ➡ : AUDIO SIGNAL ROUTE (CENTER ch)

E

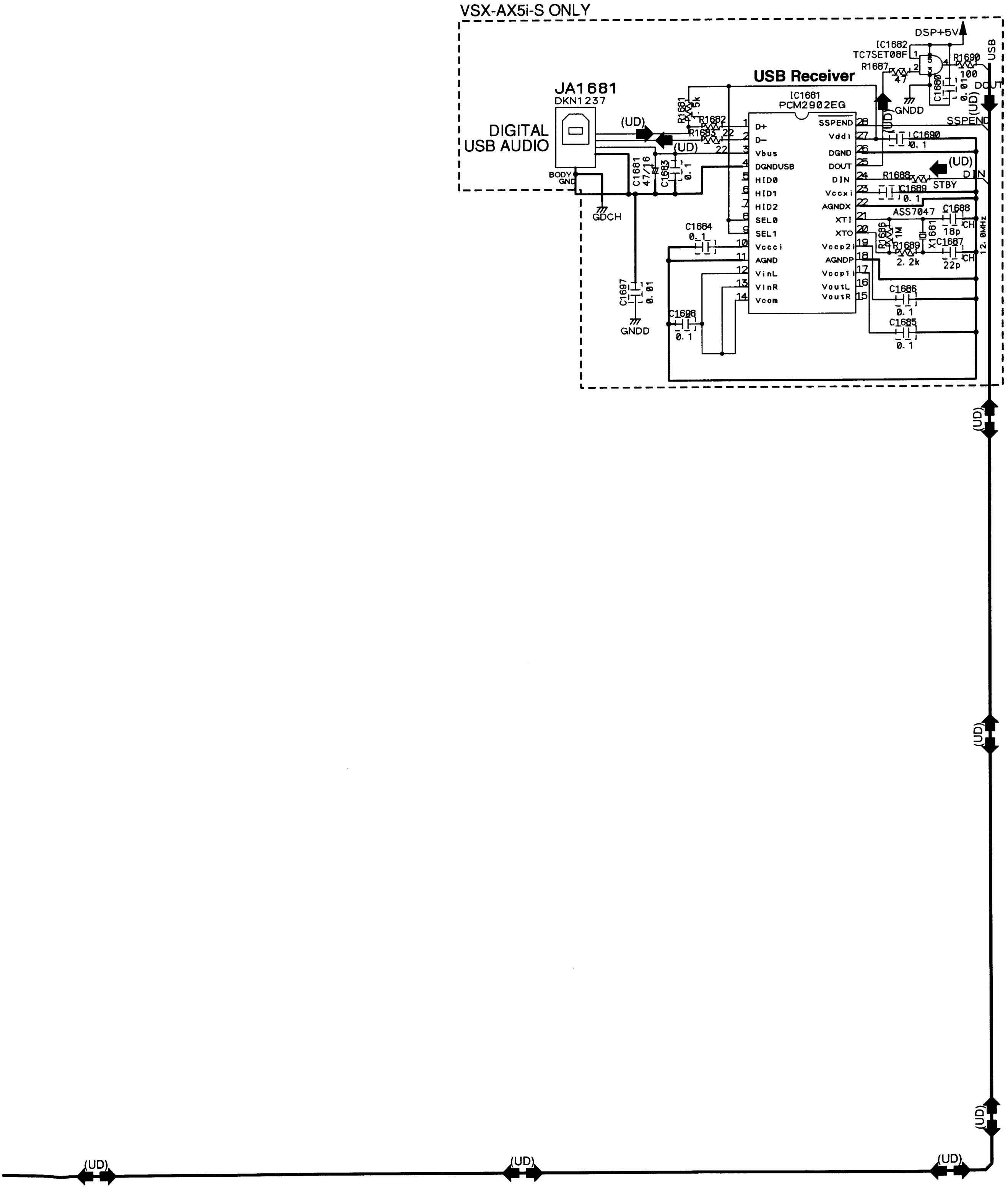
3.5 COAXIAL IN ASSY

H COAXIAL IN ASSY
(VSX-AX5i-S : AWX8300)
(VSX-AX3-S, -K : AWX8323)


A+15V
C1857 0.01 YB
C1858 0.01 YB
GNDD
JA1802
(1/2)
VSX-AX5i-S : AKB7148
VSX-AX3-S, -K : AKB7131
IN 3
(CD-R/TAPE1)
C1883 0.01 YB
R1881 75
R1883 47k
IC1881 TC74HCU04AF (1/6)
IC1881(3/6) TC74HCU04AF
R1887 100
R1885 2.2k
C1885 CH 47p
IC1881(5/6) TC74HCU04AF
C1887 CH 470p
C1888 0.01 YB
C1889 YB 1.0/6.3
R1889 100
R1890 100
L1881 DTF1064
DSP+5V
C1890 47/16
GDCH
IC1881 (6/6) TC74HCU04AF
R1886 2.2k
C1886 CH 47p
R1876 1.0
R1877 1.0
C1896 CH 470p
C1897 YB 0.01
R1897 0
R1896 0
GNDD
IN 4
(CD)
R1882 75
C1884 0.01 YB
IC1881(2/6) TC74HCU04AF
IC1881(4/6) TC74HCU04AF
R1884 47k
R1888 100
JA1802
(2/2)
VSX-AX5i-S : AKB7148
VSX-AX3-S, -K : AKB7131
DSP+5V
R1898 0
R1899 0
CN1801
D5G
OPT IN1
D5G
OPT IN2
D5G
OPT OUT1
D5G
OPT OUT2
DSP+5V
52045-0945
D CN1701
(D)
(D)
GNDD
DSP+5V
A+15V
A-15V
DOUT
DIN
SSPEND
GDA2
(UD)
(UD)
(UD)
(UD)
(UD)
(D)
(D)
GNDD
CN1802 VKN1196
DSP+5V DSP+5V D5G D5G IN1 G IN2 G IN3 G IN4 G IN5 G IN6 G OUT1 G OUT2 G
S 1/2 CN101
CN1803 AKP7068
A+15V GDA A-15V GDA DRST DSDP DLCK USBPB USBSS
AC CN2406

(D) : AUDIO SIGNAL ROUTE (DIGITAL)

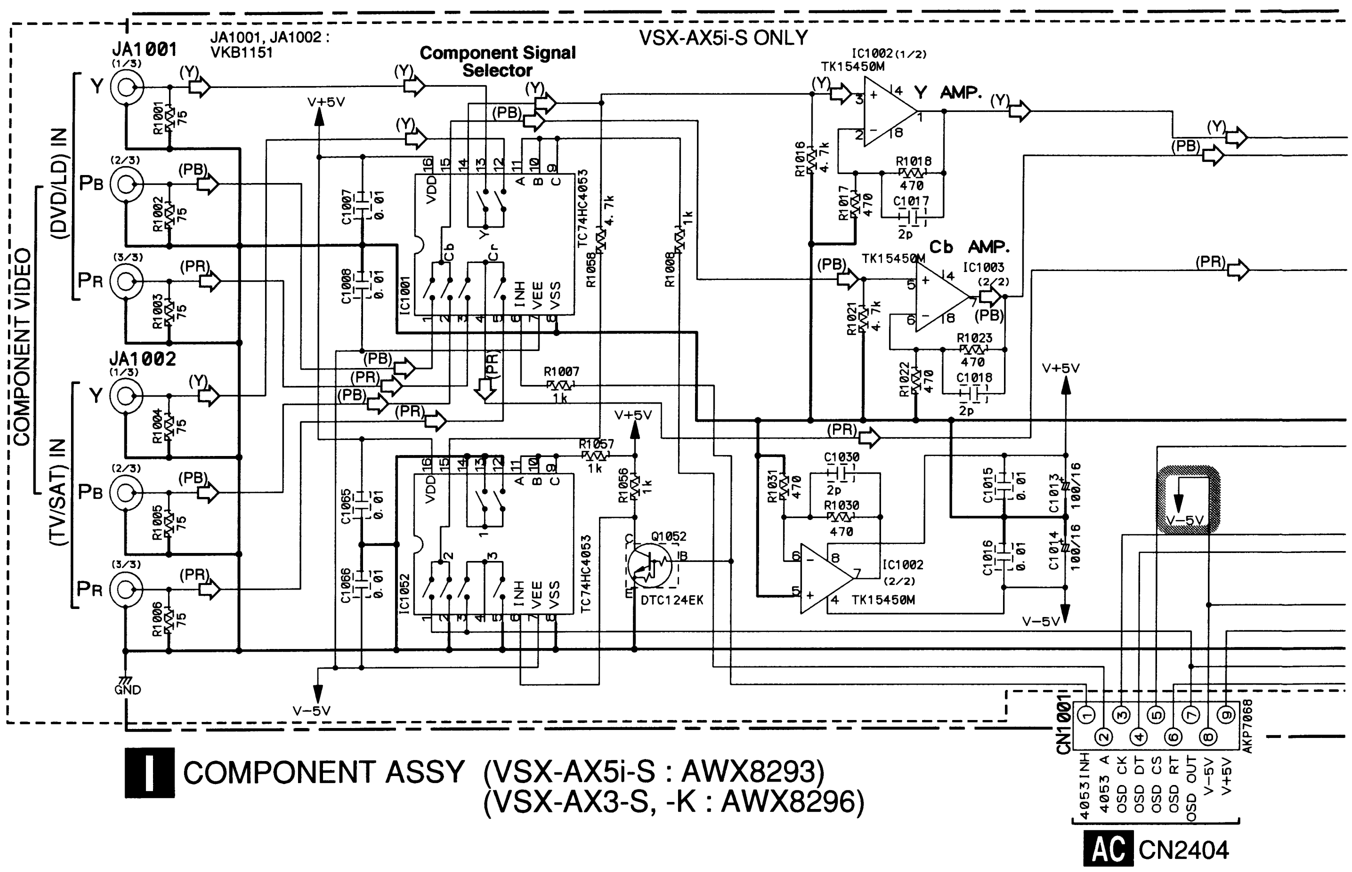
(UD) : AUDIO SIGNAL ROUTE (USB DIGITAL)


VSX-AX5i-S ONLY
JA1681
DKN1237
DIGITAL
USB AUDIO
BODY GND
GDCH
USB Receiver
IC1681
PCM2902EG
IC1682
TC7SET08F
DSP+5V
USB
R1690
100
R1687
47
C1690
0.01
DOUT
SSPEND
GNDD
R1681
1.5k
R1682
22
R1683
22
C1681
47/16
C1683
0.1
C1697
0.01
C1684
0.1
C1698
0.1
D+
D−
Vbus
DGNDUSB
HID0
HID1
HID2
SEL0
SEL1
Vccci
AGND
VinL
VinR
Vcom
SSPEND
Vddi
DGND
DOUT
DIN
Vccxi
AGNDX
XTI
XTO
Vccp2i
AGNDP
Vccp1i
VoutL
VoutR
C1690
0.1
R1688
STBY
DIN
C1689
0.1
ASS7047
C1688
18p
CH
R1686
1M
X1681
12.0MHz
R1689
2.2k
C1687
22p
C1686
0.1
C1685
0.1
(UD)

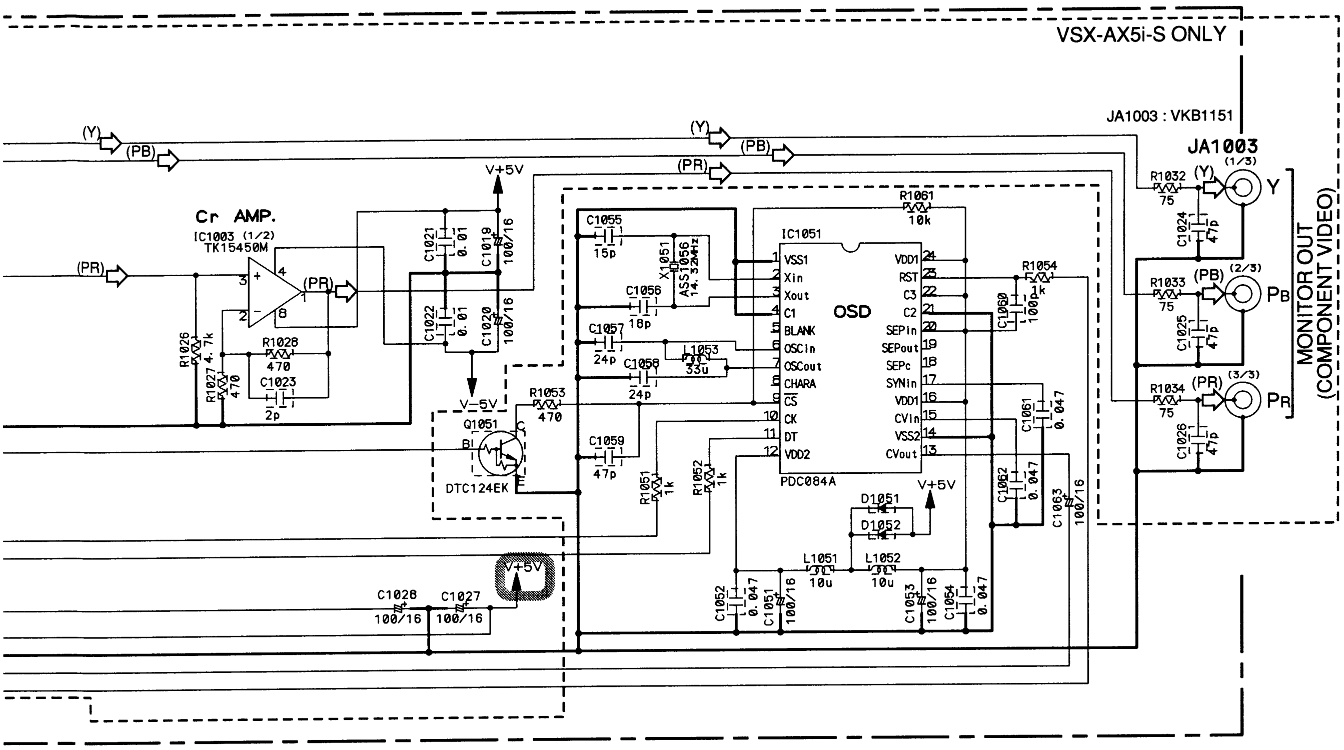
H

: The power supply is shown with the marked box.

3.6 COMPONENT ASSY


VSX-AX5i-S ONLY
JA1001, JA1002 :
VKB1151
JA1001
JA1002
COMPONENT VIDEO
(DVD/LD) IN
(TV/SAT) IN
Y
PB
PR
(1/3)
(2/3)
(3/3)
R1001 75
R1002 75
R1003 75
R1004 75
R1005 75
R1006 75
GND
Component Signal Selector
V+5V
V-5V
C1007 0.01
C1008 0.01
C1065 0.01
C1066 0.01
IC1001
IC1052
TC74HC4053
VDD
INH
VEE
VSS
A
B
C
Cb
Cr
Y
R1058 4.7k
R1008 1k
R1007 1k
R1057 1k
R1056 1k
Q1052
DTC124EK
IC1002(1/2)
TK15450M
Y AMP.
R1016 4.7k
R1017 470
R1018 470
C1017 2p
Cb AMP.
IC1003 (2/2)
R1021 4.7k
R1022 470
R1023 470
C1018 2p
C1030 2p
R1030 470
R1031 470
IC1002 (2/2)
C1015 0.01
C1016 0.01
C1013 100/16
C1014 100/16
(Y)
(PB)
(PR)
CN1001
AKP7068
4053 INH
4053 A
OSD CK
OSD DT
OSD CS
OSD RT
OSD OUT
V-5V
V+5V
AC CN2404

I COMPONENT ASSY (VSX-AX5i-S : AWX8293)
(VSX-AX3-S, -K : AWX8296)


VSX-AX5i-S ONLY
JA1003 : VKB1151
JA1003
(Y)
(PB)
(PR)
V+5V
V-5V
Cr AMP.
IC1003 (1/2)
TK15450M
R1026 4.7k
R1027 470
R1028 470
C1023 2p
C1021 0.01
C1019 100/16
C1022 0.01
C1020 100/16
R1053 470
Q1051
DTC124EK
C1055 15p
X1051 ASS1056 14.32MHz
C1056 18p
C1057 24p
C1058 24p
L1053 33u
C1059 47p
R1051 1k
R1052 1k
IC1051
OSD
PDC084A
VSS1
Xin
Xout
C1
BLANK
OSCin
OSCout
CHARA
CS
CK
DT
VDD2
VDD1
RST
C3
C2
SEPIn
SEPout
SEPc
SYNIn
VDD1
CVin
VSS2
CVout
R1061 10k
R1054 1k
C1060 100p
C1061 0.047
C1062 0.047
C1063 100/16
D1051
D1052
L1051 10u
L1052 10u
C1052 0.047
C1051 100/16
C1053 100/16
C1054 0.047
C1028 100/16
C1027 100/16
R1032 75
R1033 75
R1034 75
C1024 47p
C1025 47p
C1026 47p
(1/3) Y
(2/3) PB
(3/3) PR
MONITOR OUT (COMPONENT VIDEO)

(Y)⇨ : VIDEO SIGNAL ROUTE (Y)

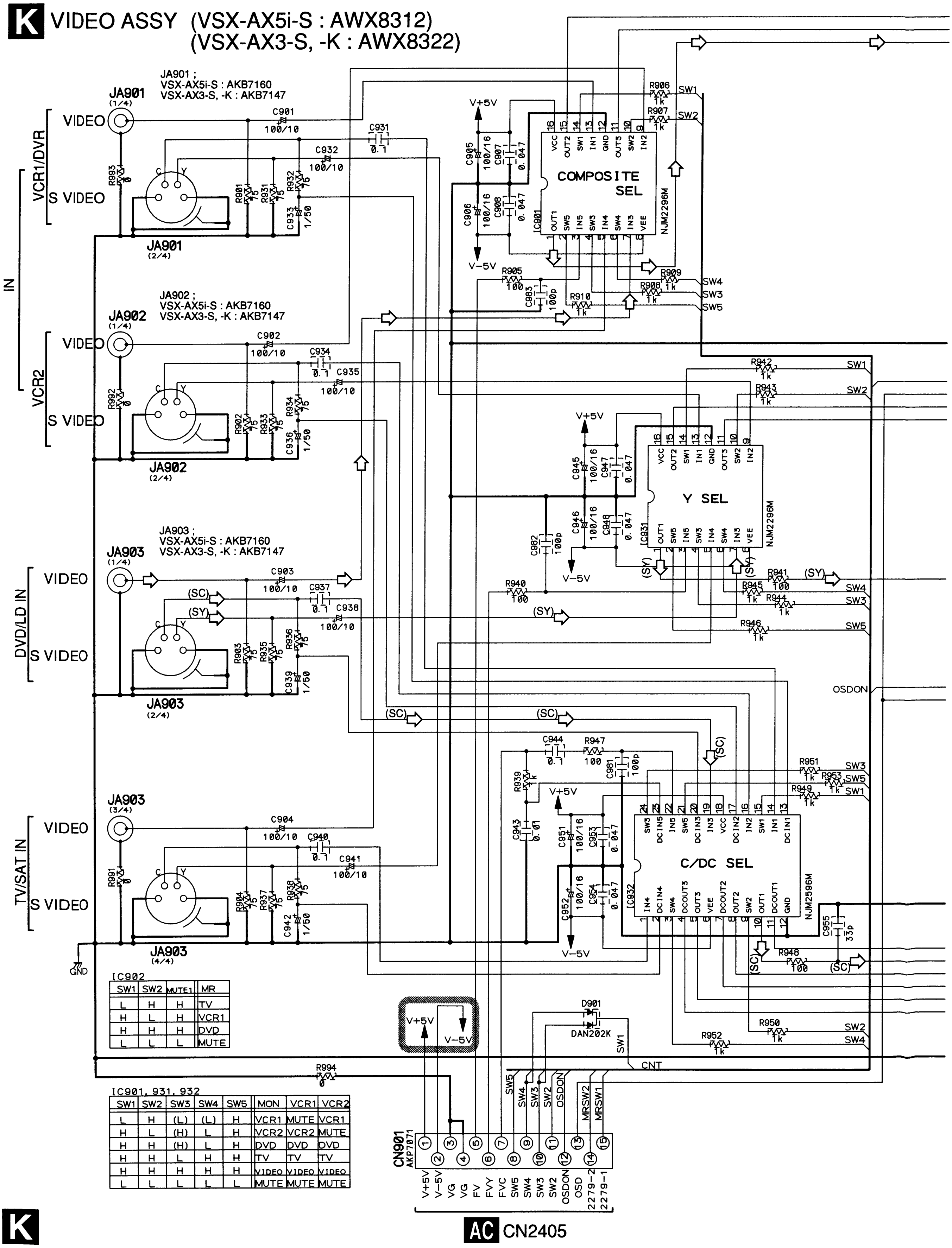
(PB)⇨ : VIDEO SIGNAL ROUTE (PB)

(PR)⇨ : VIDEO SIGNAL ROUTE (PR)

▢ : The power supply is shown with the marked box.

3.7 VIDEO ASSY

K VIDEO ASSY (VSX-AX5i-S : AWX8312)
(VSX-AX3-S, -K : AWX8322)


JA901 ;
VSX-AX5i-S : AKB7160
VSX-AX3-S, -K : AKB7147
JA901 (1/4)
JA901 (2/4)
VCR1/DVR
VIDEO
S VIDEO
IN
JA902 ;
VSX-AX5i-S : AKB7160
VSX-AX3-S, -K : AKB7147
JA902 (1/4)
JA902 (2/4)
VCR2
JA903 ;
VSX-AX5i-S : AKB7160
VSX-AX3-S, -K : AKB7147
JA903 (1/4)
JA903 (2/4)
DVD/LD IN
JA903 (3/4)
JA903 (4/4)
TV/SAT IN
GND
C901 100/10
C902 100/10
C903 100/10
C904 100/10
C931 0.1
C932 100/10
C933 1/50
C934 0.1
C935 100/10
C936 1/50
C937 0.1
C938 100/10
C939 1/50
C940 0.1
C941 100/10
C942 1/50
R901 75
R902 75
R903 75
R904 75
R931 75
R932 75
R933 75
R934 75
R935 75
R936 75
R937 75
R938 75
R991 0
R992 0
R993 0
R994 0
(SC)
(SY)
V+5V
V-5V
C905 100/16
C906 100/16
C907 0.047
C908 0.047
IC901
COMPOSITE SEL
NJM2296M
VCC OUT2 SW1 IN1 GND OUT3 SW2 IN2
OUT1 SW5 IN5 SW3 IN4 SW4 IN3 VEE
R905 100
C983 100p
R906 1k
R907 1k
R908 1k
R909 1k
R910 1k
SW1
SW2
SW3
SW4
SW5
C945 100/16
C946 100/16
C947 0.047
C948 0.047
C982 100p
IC931
Y SEL
NJM2296M
R940 100
R941 100
R942 1k
R943 1k
R944 1k
R945 1k
R946 1k
OSDON
C943 0.01
C944 0.1
R947 100
C981 100p
R939 1k
C951 100/16
C952 100/16
C953 0.047
C954 0.047
IC932
C/DC SEL
NJM2596M
SW3 DCIN5 IN5 SW5 DCIN3 IN3 VCC DCIN2 IN2 SW1 IN1 DCIN1
IN4 DCIN4 SW4 DCOUT3 OUT3 VEE DCOUT2 OUT2 SW2 OUT1 DCOUT1 GND
C955 33p
R948 100
R949 1k
R950 1k
R951 1k
R952 1k
R953 1k
D901
DAN202K
CNT
CN901
AKP7071
V+5V V-5V VG VG FV FVY FVC SW5 SW4 SW3 SW2 OSDON OSD 2279-2 2279-1
MRSW2
MRSW1
AC CN2405

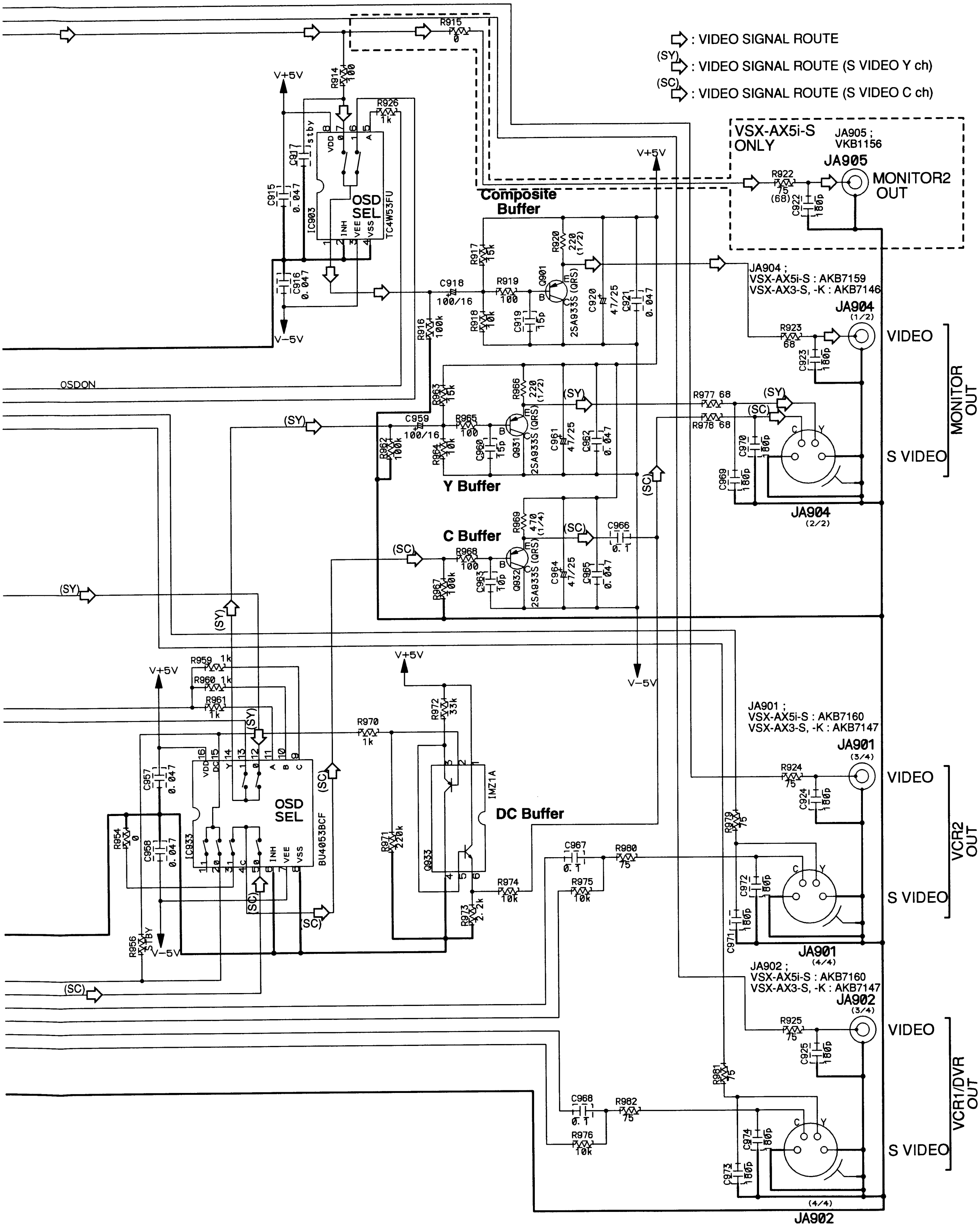
IC902

SW1	SW2	MUTE1	MR
L	H	H	TV
H	L	H	VCR1
H	H	H	DVD
L	L	L	MUTE

IC901, 931, 932

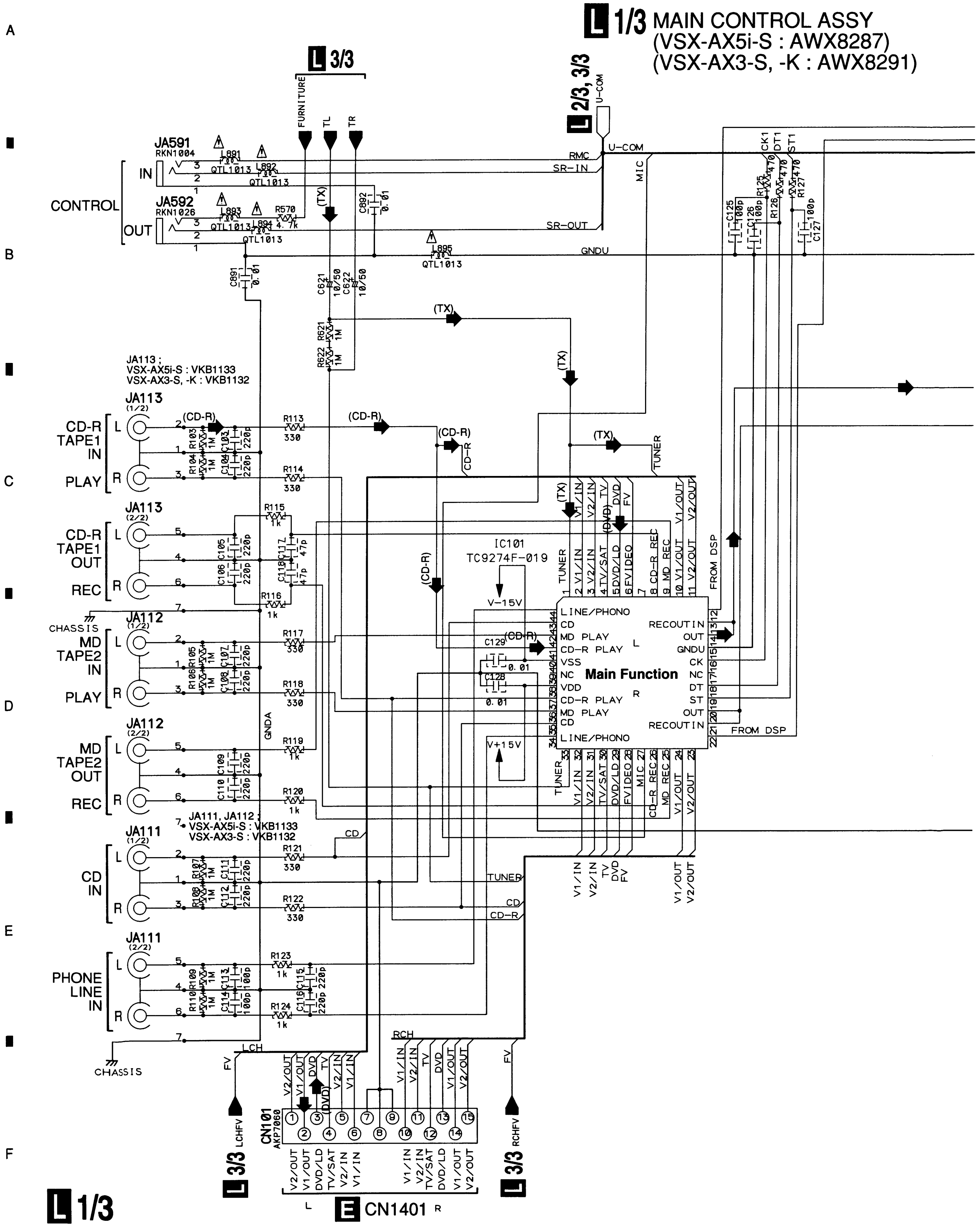
SW1	SW2	SW3	SW4	SW5	MON	VCR1	VCR2
L	H	(L)	(L)	H	VCR1	MUTE	VCR1
H	L	(H)	L	H	VCR2	VCR2	MUTE
H	H	(H)	L	H	DVD	DVD	DVD
H	H	L	H	H	TV	TV	TV
H	H	H	H	H	VIDEO	VIDEO	VIDEO
L	L	L	L	L	MUTE	MUTE	MUTE

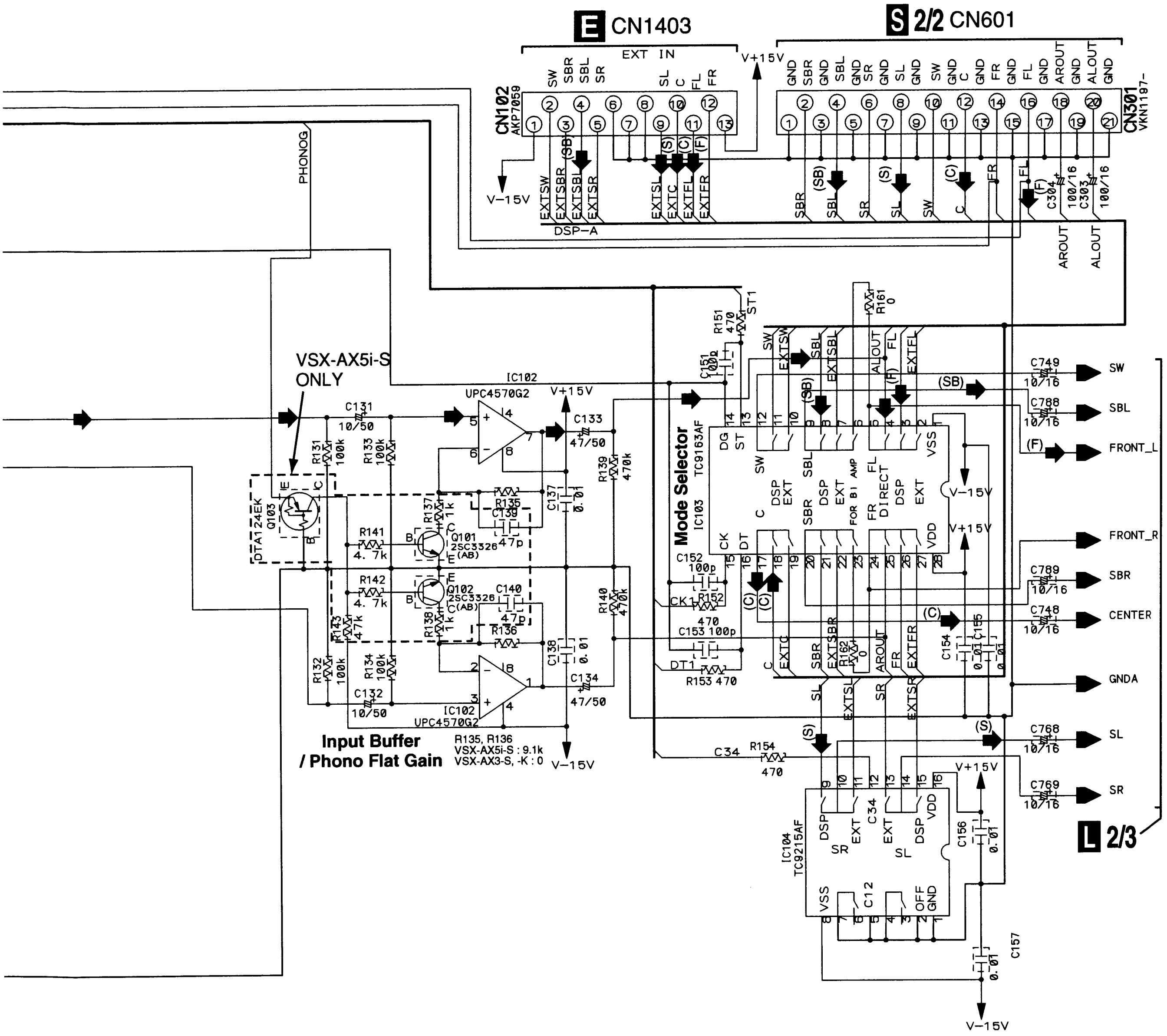
K


: VIDEO SIGNAL ROUTE
(SY) : VIDEO SIGNAL ROUTE (S VIDEO Y ch)
(SC) : VIDEO SIGNAL ROUTE (S VIDEO C ch)
VSX-AX5i-S ONLY
JA905 ; VKB1156
JA905
MONITOR2 OUT
R922 75 (68)
C922 180p
R915 0
R914 100
R926 1k
V+5V
V-5V
C917
C915 0.047
C916 0.047
stby
VDD
INH VEE VSS
IC903
OSD SEL
TC4W53FU
OSDON
Composite Buffer
C918 100/16
R916 100k
R917 15k
R918 10k
R919 100
C919 15p
R920 220 (1/2)
Q901 2SA933S (QRS)
C920 47/25
C921 0.047
JA904 ; VSX-AX5i-S : AKB7159 VSX-AX3-S, -K : AKB7146
JA904 (1/2)
R923 68
C923 180p
VIDEO
MONITOR OUT
S VIDEO
Y Buffer
C959 100/16
R962 100k
R963 15k
R964 10k
R965 100
C960 15p
R966 220 (1/2)
Q931 2SA933S (QRS)
C961 47/25
C962 0.047
R977 68
R978 68
C970 180p
C969 180p
JA904 (2/2)
C Buffer
R967 100k
R968 100
C963 10p
R969 470 (1/4)
Q932 2SA933S (QRS)
C964 47/25
C965 0.047
C966 0.1
(SY)
(SC)
R959 1k
R960 1k
R961 1k
C957 0.047
C958 0.047
R954 0
R956 STBY
IC933
OSD SEL
BU4053BCF
VDD DC Y
A B C
INH VEE VSS
R970 1k
R971 220k
R972 33k
R973 2.2k
R974 10k
Q933
IMZ1A
DC Buffer
C967 0.1
R975 10k
R980 75
JA901 ; VSX-AX5i-S : AKB7160 VSX-AX3-S, -K : AKB7147
JA901 (3/4)
R924 75
C924 180p
R979 75
C972 180p
C971 180p
JA901 (4/4)
VCR2 OUT
JA902 ; VSX-AX5i-S : AKB7160 VSX-AX3-S, -K : AKB7147
JA902 (3/4)
R925 75
C925 180p
R981 75
C968 0.1
R982 75
R976 10k
C974 180p
C973 180p
JA902 (4/4)
VCR1/DVR OUT
C Y

: The power supply is shown with the marked box.

3.8 MAIN CONTROL ASSY (1/3)


L 1/3 MAIN CONTROL ASSY
(VSX-AX5i-S : AWX8287)
(VSX-AX3-S, -K : AWX8291)
L 3/3
FURNITURE
TL
TR
L 2/3, 3/3
U-COM
RMC
SR-IN
SR-OUT
GNDU
MIC
CK1
DT1
ST1
CONTROL
IN
OUT
JA591
RKN1004
JA592
RKN1026
L891
L892
L893
L894
L895
QTL1013
R570
4.7k
C892
0.01
C891
0.01
C621
10/50
C622
10/50
R621
1M
R622
1M
(TX)
C125
100p
C126
100p
C127
100p
R125
470
R126
470
R127
470
JA113 ;
VSX-AX5i-S : VKB1133
VSX-AX3-S, -K : VKB1132
JA113 (1/2)
CD-R TAPE1 IN PLAY
JA113 (2/2)
CD-R TAPE1 OUT REC
JA112 (1/2)
MD TAPE2 IN PLAY
JA112 (2/2)
MD TAPE2 OUT REC
JA111, JA112 ;
VSX-AX5i-S : VKB1133
VSX-AX3-S : VKB1132
JA111 (1/2)
CD IN
JA111 (2/2)
PHONE LINE IN
CHASSIS
GNDA
(CD-R)
R113 330
R114 330
R115 1k
R116 1k
R117 330
R118 330
R119 1k
R120 1k
R121 330
R122 330
R123 1k
R124 1k
R103 1M
R104 1M
R105 1M
R106 1M
R107 1M
R108 1M
R109 1M
R110 1M
C103 220p
C104 220p
C105 220p
C106 220p
C107 220p
C108 220p
C109 220p
C110 220p
C111 220p
C112 220p
C113 100p
C114 100p
C115 220p
C116 220p
C117 47p
C118 47p
IC101
TC9274F-019
Main Function
V-15V
V+15V
C129 0.01
C128 0.01
LINE/PHONO
CD
MD PLAY
CD-R PLAY
VSS
NC
VDD
RECOUTIN
OUT
GNDU
CK
DT
ST
L
R
FROM DSP
TUNER
V1/IN
V2/IN
TV/SAT
DVD/LD
FVIDEO
CD-R REC
MD REC
V1/OUT
V2/OUT
(DVD)
TV
DVD
FV
CD
CD-R
LCH
RCH
CN101
AKP7060
L 3/3 LCHFV
L 3/3 RCHFV
E CN1401
L 1/3
A
B
C
D
E
F


E CN1403
EXT IN
S 2/2 CN601
CN102
AKP7059
SW SBR SBL SR SL C FL FR
V+15V
V-15V
GND SBR GND SBL GND SR GND SL GND SW GND C GND FR GND FL GND AROUT GND ALOUT GND
CN301
VKN1197-
EXTSW EXTSBR EXTSBL EXTSR EXTSL EXTC EXTFL EXTFR
DSP-A
C304 100/16
C303 100/16
AROUT
ALOUT
PHONOG
VSX-AX5i-S ONLY
IC102
UPC4570G2
C131 10/50
R131 100k
R133 100k
C133 47/50
R139 470k
C137 0.01
R135
C139 47p
R137 1k
Q101 2SC3326 (AB)
R141 4.7k
R142 4.7k
Q102 2SC3326 (AB)
C140 47p
R138 1k
R136
R143 47k
R140 470k
C138 0.01
R132 100k
R134 100k
C132 10/50
C134 47/50
Q103 DTA124EK
Input Buffer / Phono Flat Gain
R135, R136
VSX-AX5i-S : 9.1k
VSX-AX3-S, -K : 0
R151 470
ST1
C151 100p
R161 0
Mode Selector
IC103
TC9163AF
DG ST CK DT
SW DSP EXT C SBL DSP EXT SBR FOR BI AMP FL FR DIRECT DSP EXT VSS VDD
C152 100p
CK1 R152 470
C153 100p
DT1 R153 470
R162 0
C154 0.01
C155 0.01
C34 R154 470
IC104
TC9215AF
DSP EXT SR C34 EXT SL DSP VDD VSS C12 OFF GND
C156 0.01
C157 0.01
C749 10/16 SW
C788 10/16 SBL
FRONT_L
FRONT_R
C789 10/16 SBR
C748 10/16 CENTER
GNDA
C768 10/16 SL
C769 10/16 SR
L 2/3

➡ : AUDIO SIGNAL ROUTE (Lch)

(CD-R) ➡ : AUDIO SIGNAL ROUTE (CD-R Lch)

(TX) ➡ : AUDIO SIGNAL ROUTE (TUNER Lch)

(DVD) ➡ : AUDIO SIGNAL ROUTE (DVD Lch)

(F) ➡ : AUDIO SIGNAL ROUTE (FRONT Lch)

(S) ➡ : AUDIO SIGNAL ROUTE (SURROUND Lch)

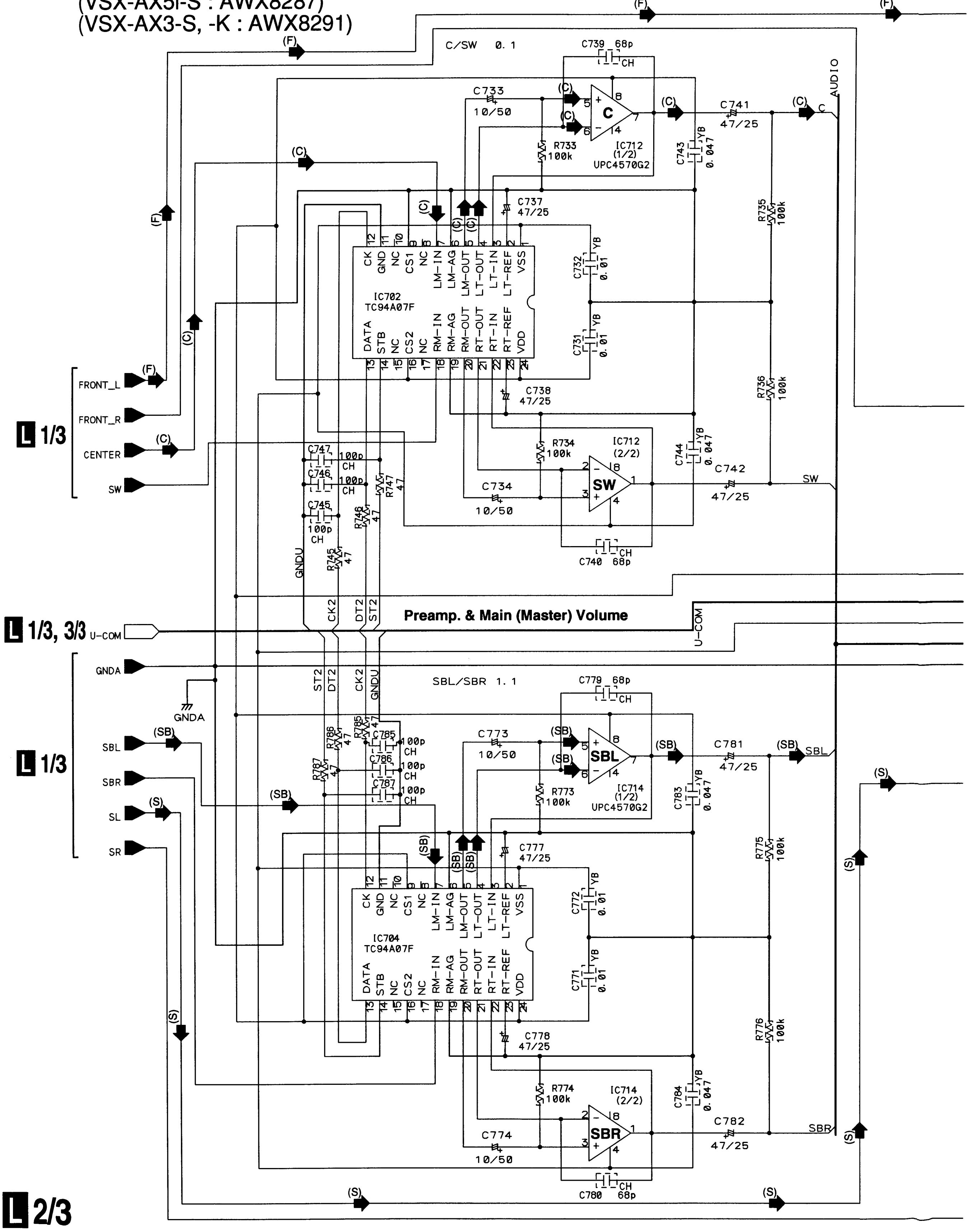
(SB) ➡ : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)

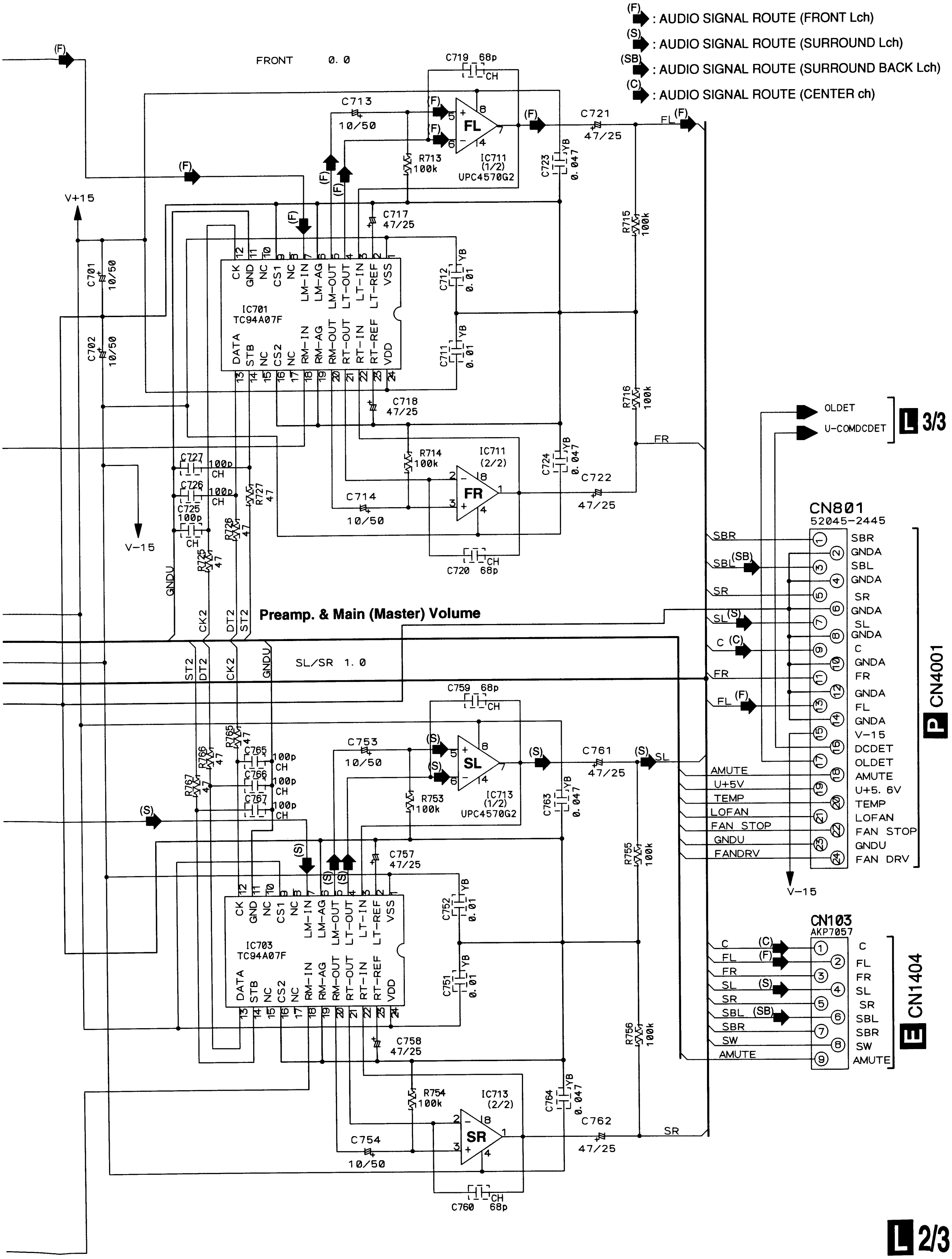
(C) ➡ : AUDIO SIGNAL ROUTE (CENTER ch)

L 1/3

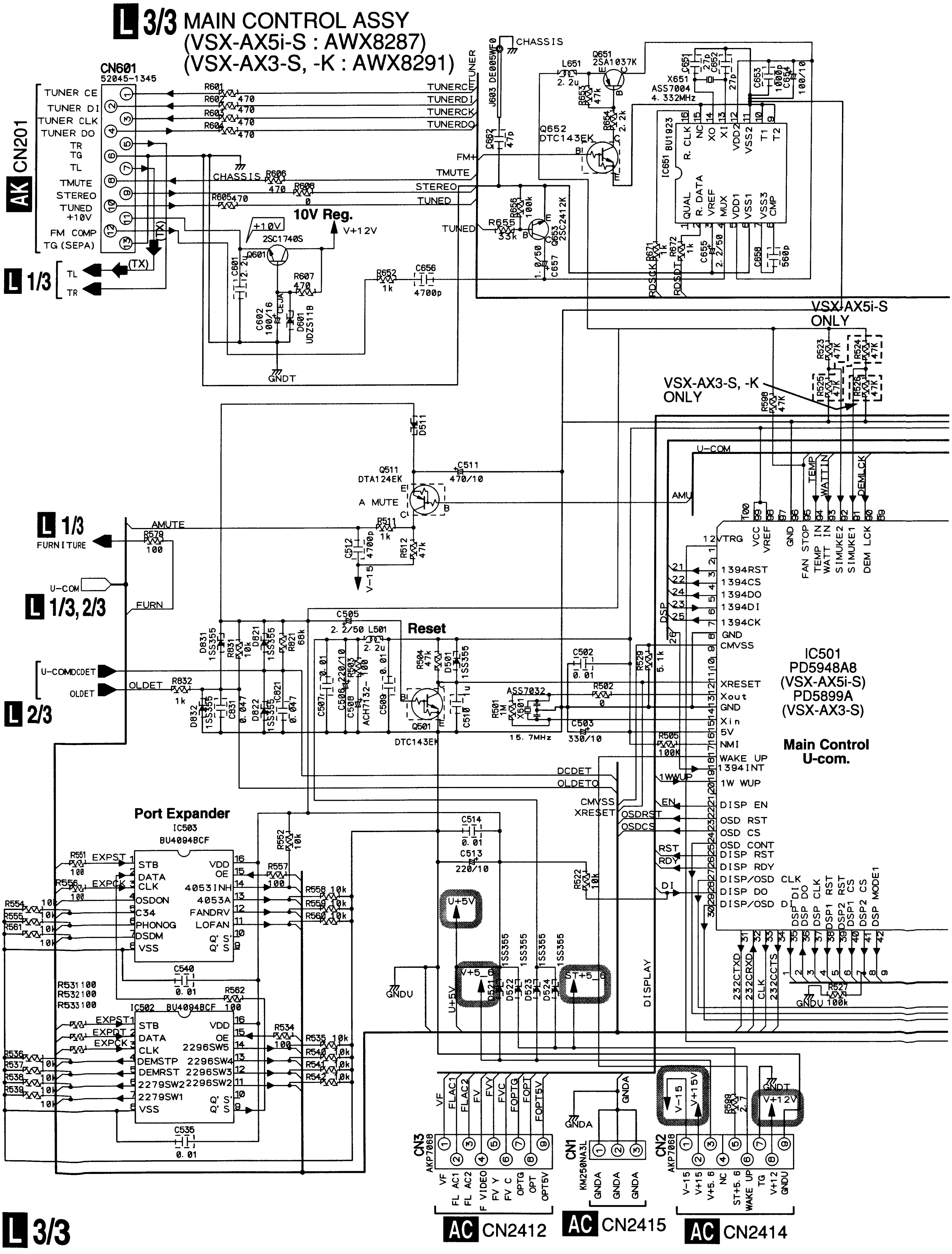
3.9 MAIN CONTROL ASSY (2/3)

L 2/3 MAIN CONTROL ASSY
(VSX-AX5i-S : AWX8287)
(VSX-AX3-S, -K : AWX8291)

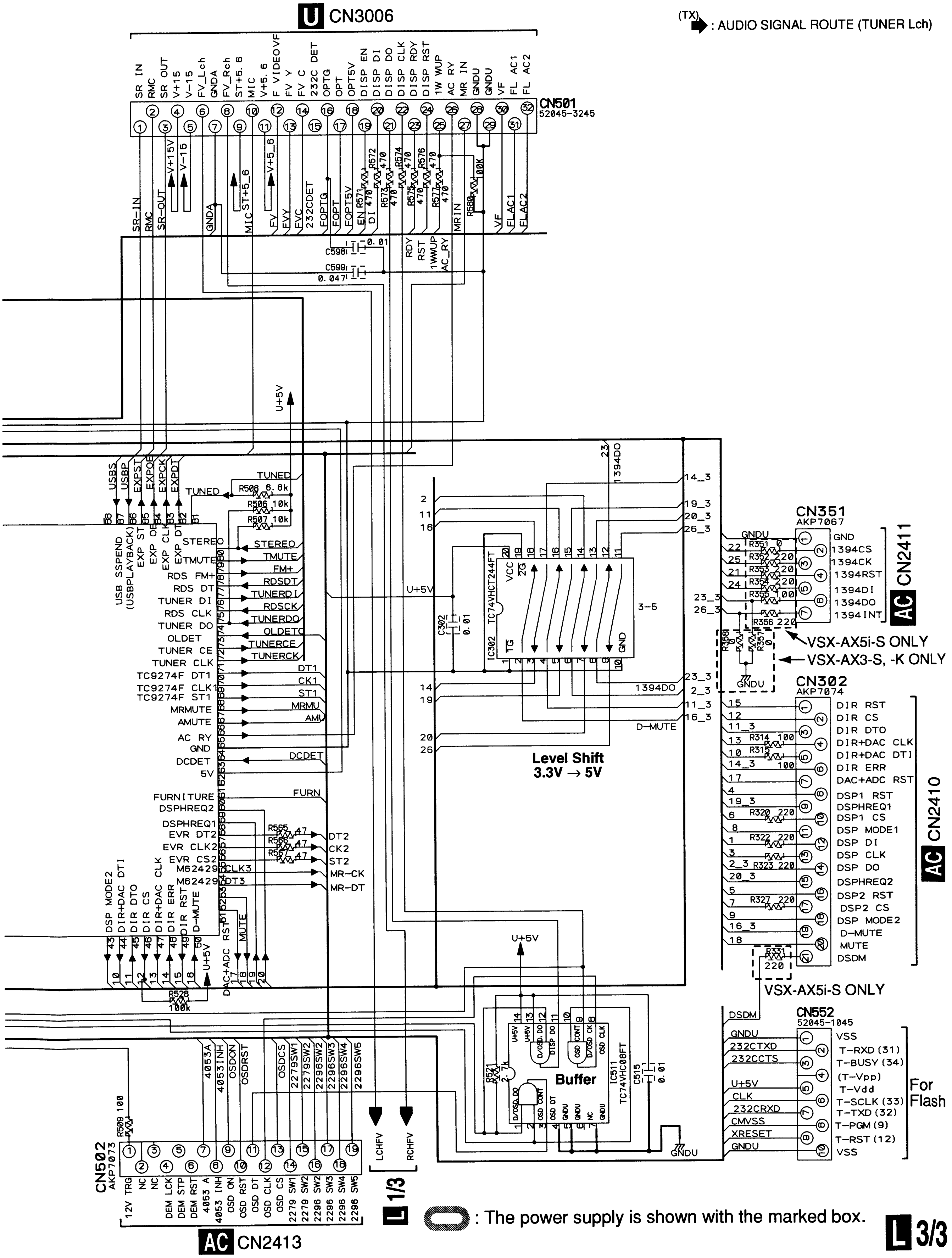

A
B
C
D
E
F
C/SW 0. 1
C739 68p CH
C733 10/50
IC712 (1/2) UPC4570G2
R733 100k
C743 YB 0.047
C741 47/25
AUDIO
C737 47/25
R735 100k
IC702 TC94A07F
CK GND NC CS1 NC LM-IN LM-AG LM-OUT LT-OUT LT-IN LT-REF VSS
DATA STB NC CS2 NC RM-IN RM-AG RM-OUT RT-OUT RT-IN RT-REF VDD
C732 YB 0.01
C731 YB 0.01
C738 47/25
R736 100k
L 1/3
FRONT_L
FRONT_R
CENTER
SW
C747 100p CH
C746 100p CH
C745 100p CH
R747 47
R746 47
R745 47
GNDU
R734 100k
IC712 (2/2)
C734 10/50
C744 YB 0.047
C742 47/25
C740 68p CH
CK2 DT2 ST2
Preamp. & Main (Master) Volume
L 1/3, 3/3
U-COM
GNDA
ST2 DT2 CK2 GNDU
SBL/SBR 1. 1
C779 68p CH
C773 10/50
IC714 (1/2) UPC4570G2
R773 100k
C783 YB 0.047
C781 47/25
L 1/3
SBL
SBR
SL
SR
R786 47
R785 47
R787 47
C785 100p CH
C786 100p CH
C787 100p CH
C777 47/25
R775 100k
IC704 TC94A07F
C772 YB 0.01
C771 YB 0.01
C778 47/25
R776 100k
R774 100k
IC714 (2/2)
C774 10/50
C784 YB 0.047
C782 47/25
C780 68p CH
(F)
(C)
(SB)
(S)
L 2/3


(F) : AUDIO SIGNAL ROUTE (FRONT Lch)
(S) : AUDIO SIGNAL ROUTE (SURROUND Lch)
(SB) : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)
(C) : AUDIO SIGNAL ROUTE (CENTER ch)
FRONT 0.0
C719 68p CH
C713 10/50
FL
IC711 (1/2) UPC4570G2
R713 100k
C721 47/25
C723 YB 0.047
FL
V+15
C717 47/25
C701 10/50
C702 10/50
IC701 TC94A07F
CK GND NC CS1 NC LM-IN LM-AG LM-OUT LT-OUT LT-IN LT-REF VSS
DATA STB NC CS2 NC RM-IN RM-AG RM-OUT RT-OUT RT-IN RT-REF VDD
C712 YB 0.01
C711 YB 0.01
R715 100k
R716 100k
C718 47/25
R714 100k
IC711 (2/2)
FR
C714 10/50
C724 YB 0.047
C722 47/25
C720 68p CH
FR
C727 100p CH
C726 100p CH
C725 100p CH
R727 47
R726 47
R725 47
V-15
GNDU
CK2 DT2 ST2
Preamp. & Main (Master) Volume
ST2 DT2 CK2 GNDU
SL/SR 1.0
OLDET
U-COMDCDET
L 3/3
CN801 52045-2445
SBR GNDA SBL GNDA SR GNDA SL GNDA C GNDA FR GNDA FL GNDA V-15 DCDET OLDET AMUTE U+5.6V TEMP LOFAN FAN STOP GNDU FAN DRV
P CN4001
SBR SBL SR SL C FR FL
AMUTE U+5V TEMP LOFAN FAN STOP GNDU FANDRV
V-15
C759 68p CH
C753 10/50
SL
IC713 (1/2) UPC4570G2
R753 100k
C761 47/25
C763 YB 0.047
SL
R765 47
R766 47
R767 47
C765 100p CH
C766 100p CH
C767 100p CH
C757 47/25
IC703 TC94A07F
C752 YB 0.01
C751 YB 0.01
R755 100k
R756 100k
C758 47/25
R754 100k
IC713 (2/2)
SR
C754 10/50
C764 YB 0.047
C762 47/25
C760 68p CH
SR
CN103 AKP7057
C FL FR SL SR SBL SBR SW AMUTE
E CN1404
L 2/3

3.10 MAIN CONTROL ASSY (3/3)


L 3/3 MAIN CONTROL ASSY
(VSX-AX5i-S : AWX8287)
(VSX-AX3-S, -K : AWX8291)
CN601
52045-1345
TUNER CE
TUNER DI
TUNER CLK
TUNER DO
TR
TG
TL
TMUTE
STEREO
TUNED
+10V
FM COMP
TG (SEPA)
AK CN201
L 1/3
TL
TR
(TX)
R601 470
R602 470
R603 470
R604 470
TUNERCE
TUNERDI
TUNERCK
TUNERDO
FM+
TMUTE
STEREO
TUNED
CHASSIS
R606 470
R608 0
R605 470
10V Reg.
+10V
V+12V
2SC1740S
Q601
C601 2.2u
R607 470
C602 100/16
CEJA
D601 UDZS11B
GNDT
R652 1k
C656 4700p
J603 DE005WF0
CHASSIS
L651 2.2u
Q651 2SA1037K
R653 47k
R654 2.2k
C662 47p
Q652 DTC143EK
R656 100k
R655 33k
Q653 2SC2412K
C657 1.0/50
X651 ASS7004 4.332MHz
C651 27p
C652 27p
C653 1000p
C654 100/10
IC651 BU1923
R. CLK
NC
XO
XI
VDD2
VSS2
T1
T2
QUAL
R. DATA
VREF
MUX
VDD1
VSS1
VSS3
CMP
R671 1k
R672 1k
C655 2.2/50
C658 560p
RDSCK
RDSDT
VSX-AX5i-S ONLY
VSX-AX3-S, -K ONLY
R523 47K
R524 47K
R525 47K
R526 47K
R598 47K
U-COM
TEMP
WATTIN
DEMLCK
AMU
D511
Q511 DTA124EK
A MUTE
C511 470/10
R511 1k
C512 4700p
R512 47k
V-15
L 1/3
FURNITURE
AMUTE
R579 100
U-COM
L 1/3, 2/3
FURN
U-COMDCDET
OLDET
L 2/3
OLDET
R832 1k
D831 1SS355
R831 10k
D821 1SS355
R821 68k
D832 1SS355
C831 0.047
D822 1SS355
C821 0.047
C505 2.2/50
L501 2.2u
C507 0.01
C506 220/10
C508
R503 100
ACH7132-
C509 0.01
Reset
R504 47k
D501 1SS355
Q501 DTC143EK
C510 1u
R501 1M
X501 ASS7032 15.7MHz
C502 0.01
R502 0
C503 330/10
R529 5.1k
DSP
R505 100K
IC501
PD5948A8
(VSX-AX5i-S)
PD5899A
(VSX-AX3-S)
Main Control
U-com.
VTRG
VCC
VREF
GND
FAN STOP
TEMP IN
WATT IN
SIMUKE2
SIMUKE1
DEM LCK
1394RST
1394CS
1394DO
1394DI
1394CK
GND
CMVSS
XRESET
Xout
GND
Xin
5V
NMI
WAKE UP
1394INT
1W WUP
DISP EN
OSD RST
OSD CS
OSD CONT
DISP RST
DISP RDY
DISP/OSD CLK
DISP DO
DISP/OSD DI
DSP DI
DSP DO
DSP CLK
DSP1 RST
DSP2 RST
DSP1 CS
DSP2 CS
DSP MODE1
232CTXD
232CRXD
CLK
232CCTS
R527 100k
GNDU
DCDET
OLDETO
CMVSS
XRESET
OSDRST
OSDCS
1WWUP
EN
RST
RDY
DI
DISPLAY
Port Expander
IC503
BU4094BCF
STB
DATA
CLK
OSDON
C34
PHONOG
DSDM
VSS
VDD
OE
4053INH
4053A
FANDRV
LOFAN
Q'S
QS
R551 100
R556 100
EXPST
EXPCK
R557 100
R552 10k
R558 10k
R559 10k
R560 10k
R554 10k
R555 10k
R561 10k
C540 0.01
R531 100
R532 100
R533 100
IC502 BU4094BCF
R562 100
EXPST1
EXPDT 2
EXPCK 3
STB
DATA
CLK
DEMSTP
DEMRST
2279SW2
2279SW1
VSS
VDD
OE
2296SW5
2296SW4
2296SW3
2296SW2
R534 100
R535 10k
R540 10k
R541 10k
R542 10k
R536 10k
R537 10k
R538 10k
R539 10k
C535 0.01
C514 0.01
C513 220/10
R522 10k
U+5V
V+5_6
ST+5_6
D521 1SS355
D522 1SS355
D523 1SS355
D524 1SS355
GNDU
V-15
V+15V
V+12V
GNDT
R599 2.7
GNDA
CN3 AKP7068
VF
FL AC1
FL AC2
F VIDEO
FV Y
FV C
OPTG
OPT
OPT5V
AC CN2412
CN1 KM250NA3L
GNDA
AC CN2415
CN2 AKP7068
V-15
V+15
V+5.6
NC
ST+5.6
WAKE UP
TG
V+12
GNDU
AC CN2414
L 3/3

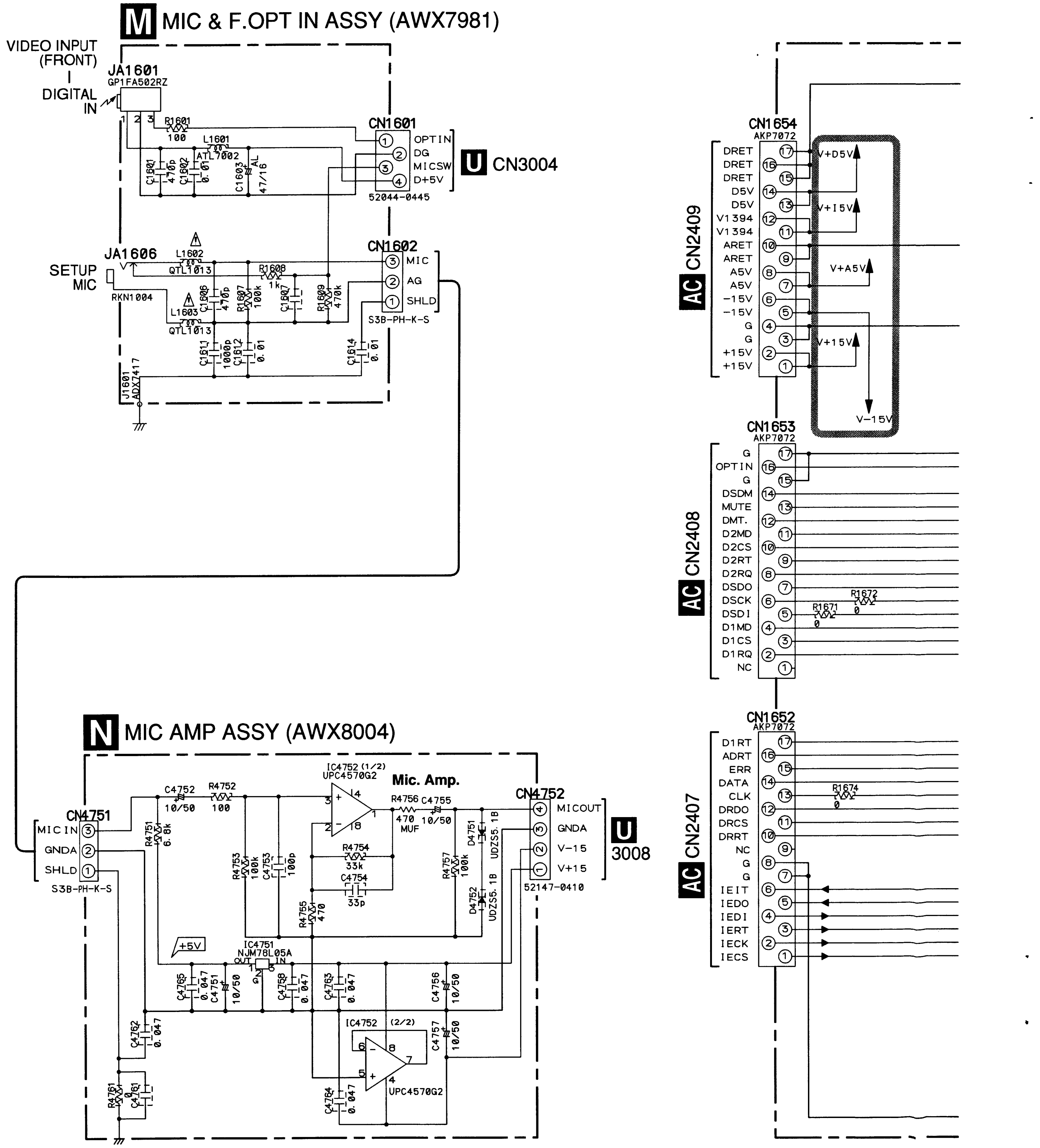
(TX): AUDIO SIGNAL ROUTE (TUNER Lch)


U CN3006
SR IN
RMC
SR OUT
V+15
V-15
FV_Lch
GNDA
FV_Rch
ST+5.6
MIC
V+5.6
F VIDEOVF
FV Y
FV C
232C DET
OPTG
OPT
OPT5V
DISP EN
DISP DI
DISP DO
DISP CLK
DISP RDY
DISP RST
1W WUP
AC RY
MR IN
GNDU
GNDU
VF
FL AC1
FL AC2
CN501
52045-3245
V+15V
V-15
ST+5_6
V+5_6
SR-IN
RMC
SR-OUT
GNDA
MIC
FV
FVY
FVC
232CDET
FOPTG
FOPT
FOPT5V
EN
DI
R571 470
R572 470
R573 470
R574 470
R575 470
R576 470
R577 470
R580 100K
RDY
RST
1WWUP
AC_RY
MRIN
VF
FLAC1
FLAC2
C598 0.01
C599 0.047
U+5V
USBS
USBP
EXPST
EXPOE
EXPCK
EXPDT
USB SSPEND (USBPLAYBACK)
EXP ST
EXP OE
EXP CLK
EXP DT
TUNED
R508 6.8k
R506 10k
R507 10k
STEREO
TMUTE
FM+
RDSDT
TUNERDI
RDSCK
TUNERDO
OLDETC
TUNERCE
TUNERCK
RDS FM+
RDS DT
TUNER DI
RDS CLK
TUNER DO
OLDET
TUNER CE
TUNER CLK
TC9274F DT1
TC9274F CLK1
TC9274F ST1
MRMUTE
AMUTE
AC RY
GND
DCDET
5V
FURNITURE
DSPHREQ2
DSPHREQ1
EVR DT2
EVR CLK2
EVR CS2
M62429 CLK3
M62429 DT3
DT1
CK1
ST1
MRMU
AMU
DCDET
FURN
R565 47
R566 47
R567 47
DT2
CK2
ST2
MR-CK
MR-DT
DSP MODE2
DIR+DAC DTI
DIR DTO
DIR CS
DIR+DAC CLK
DIR ERR
DIR RST
D-MUTE
U+5V
DAC+ADC RST
MUTE
R528 100k
U+5V
IC302
TC74VHCT244FT
C302 0.01
VCC
2G
1G
GND
3-5
Level Shift
3.3V → 5V
23
1394DO
14_3
19_3
20_3
26_3
23_3
26_3
23_3
2_3
11_3
16_3
1394DO
D-MUTE
CN351
AKP7067
GNDU
R351 0
R352 220
R353 220
R354 220
R355 100
R356 220
R357 0
R358 0
GND
1394CS
1394CK
1394RST
1394DI
1394DO
1394INT
AC CN2411
VSX-AX5i-S ONLY
VSX-AX3-S, -K ONLY
CN302
AKP7074
R314 100
R315 100
R320 220
R322 220
R323 220
R327 220
R331 220
DIR RST
DIR CS
DIR DTO
DIR+DAC CLK
DIR+DAC DTI
DIR ERR
DAC+ADC RST
DSP1 RST
DSPHREQ1
DSP1 CS
DSP MODE1
DSP DI
DSP CLK
DSP DO
DSPHREQ2
DSP2 RST
DSP2 CS
DSP MODE2
D-MUTE
MUTE
DSDM
AC CN2410
VSX-AX5i-S ONLY
DSDM
CN552
52045-1045
GNDU
232CTXD
232CCTS
U+5V
CLK
232CRXD
CMVSS
XRESET
GNDU
VSS
T-RXD (31)
T-BUSY (34)
(T-Vpp)
T-Vdd
T-SCLK (33)
T-TXD (32)
T-PGM (9)
T-RST (12)
VSS
For Flash
Buffer
IC511
TC74VHC08FT
C515 0.01
R521 4.7k
D/OSD DO
DISP DO
OSD CONT
D/OSD CK
OSD CLK
OSD DT
GNDU
NC
GNDU
4053A
4053INH
OSDON
OSDRST
OSDCS
2279SW1
2279SW2
2296SW2
2296SW3
2296SW4
2296SW5
LCHFV
RCHFV
L 1/3
CN502
AKP7073
R509 100
12V TRG
NC
NC
DEM LCK
DEM STP
DEM RST
4053 A
4053 INH
OSD ON
OSD RST
OSD DT
OSD CLK
OSD CS
2279 SW1
2279 SW2
2296 SW3
2296 SW3
2296 SW4
2296 SW5
AC CN2413

: The power supply is shown with the marked box.

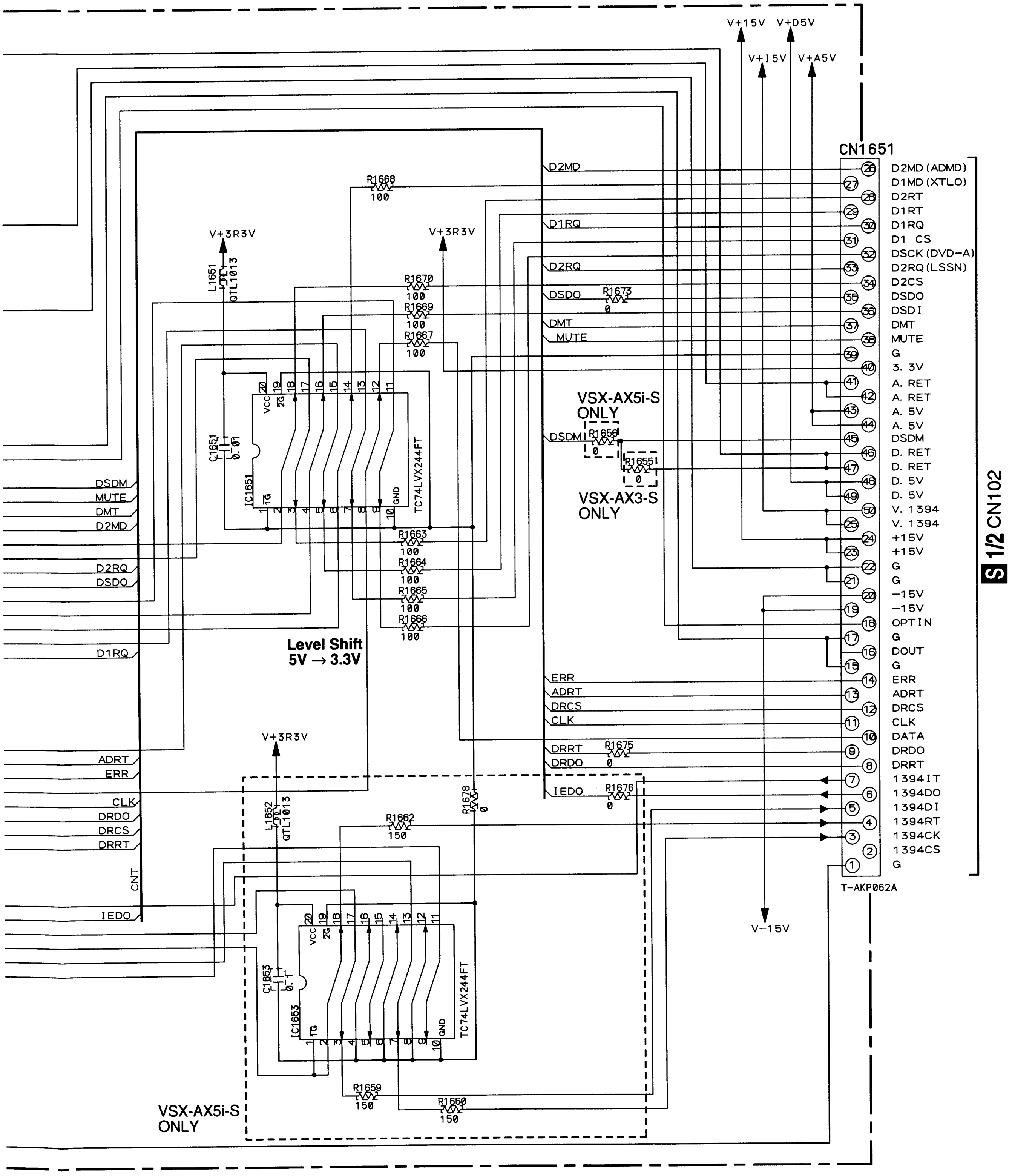
L 3/3

3.11 MIC & F.OPT IN, MIC AMP and DSP CONNECTION ASSYS


M MIC & F.OPT IN ASSY (AWX7981)
VIDEO INPUT (FRONT) / DIGITAL IN
JA1601 GP1FA502RZ
R1601 100
L1601 ATL7002
C1601 470p
C1602 0.01
C1603 47/16 AL
CN1601
OPTIN
DG
MICSW
D+5V
52044-0445
U CN3004
JA1606
SETUP MIC
RKN1004
L1602 QTL1013
L1603 QTL1013
R1608 1k
C1606 470p
R1607 100k
C1607
R1609 470k
C1611 1000p
C1612 0.01
C1614 0.01
CN1602
MIC
AG
SHLD
S3B-PH-K-S
J1601 ADX7417
N MIC AMP ASSY (AWX8004)
CN4751
MICIN
GNDA
SHLD
S3B-PH-K-S
C4752 10/50
R4752 100
R4751 6.8k
R4753 100k
C4753 100p
IC4752 (1/2) UPC4570G2
Mic. Amp.
R4754 33k
C4754 33p
R4755 470
R4756 470
C4755 10/50 MUF
R4757 100k
D4751 UDZS5.1B
D4752 UDZS5.1B
CN4752
MICOUT
GNDA
V-15
V+15
52147-0410
U 3008
+5V
IC4751 NJM78L05A
OUT IN G
C4765 0.047
C4751 10/50
C4758 0.047
C4763 0.047
C4756 10/50
C4762 0.047
R4761 0
C4761
IC4752 (2/2)
UPC4570G2
C4757 10/50
C4764 0.047
CN1654 AKP7072
DRET
DRET
DRET
D5V
D5V
V1394
V1394
ARET
ARET
A5V
A5V
-15V
-15V
G
G
+15V
+15V
V+D5V
V+15V
V+A5V
V+15V
V-15V
AC CN2409
CN1653 AKP7072
G
OPTIN
G
DSDM
MUTE
DMT.
D2MD
D2CS
D2RT
D2RQ
DSDO
DSCK
DSDI
D1MD
D1CS
D1RQ
NC
R1671 0
R1672 0
AC CN2408
CN1652 AKP7072
D1RT
ADRT
ERR
DATA
CLK
DRDO
DRCS
DRRT
NC
G
G
IEIT
IEDO
IEDI
IERT
IECK
IECS
R1674 0
AC CN2407

M N O

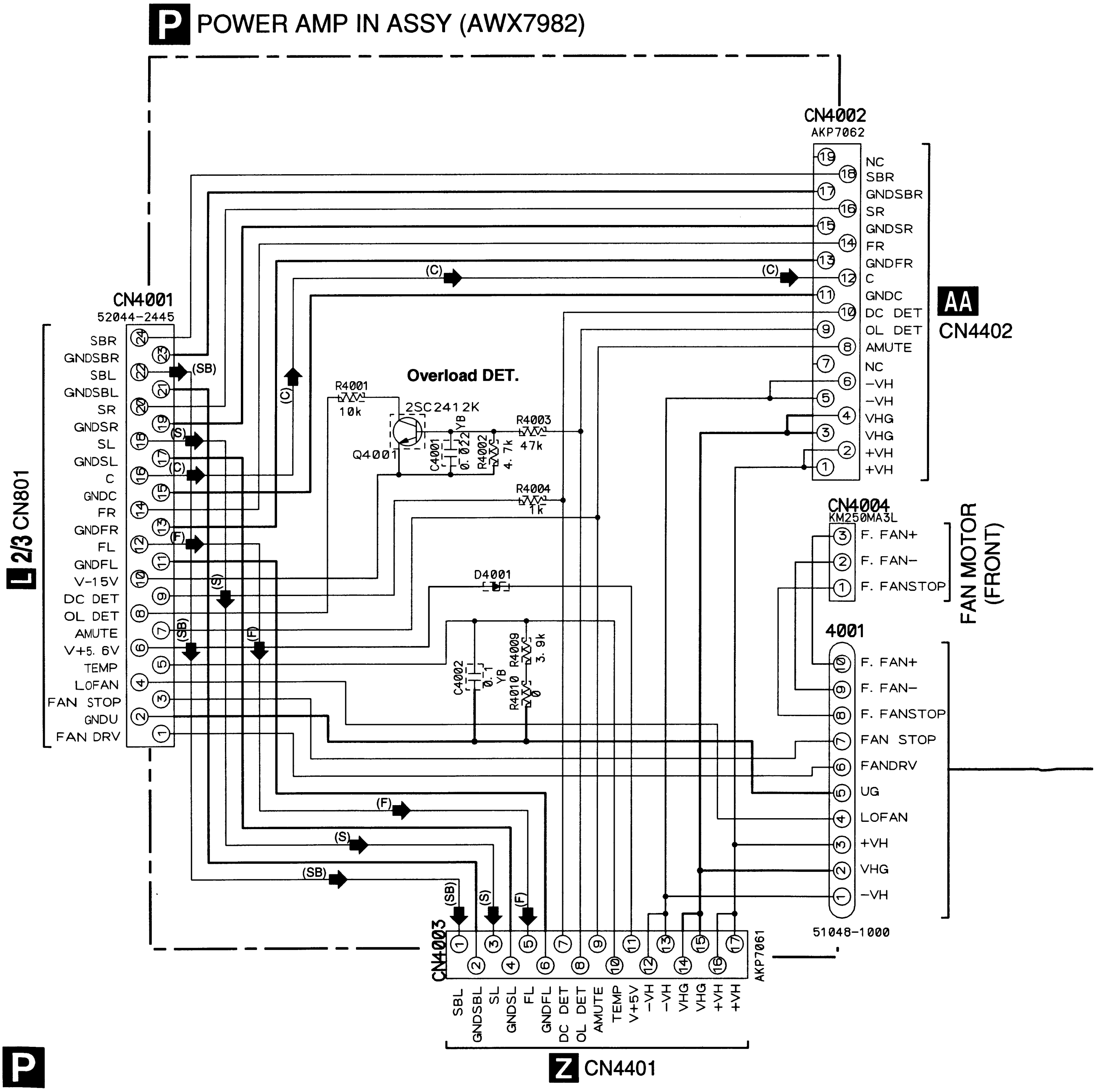
O DSP CONNECTION ASSY (VSX-AX5i-S : AWX8299) (VSX-AX3-S, -K : AWX8024)


V+15V
V+D5V
V+I5V
V+A5V
CN1651
V+3R3V
L1651 QTL1013
C1651 0.01
IC1651
TC74LVX244FT
VCC
2G
1G
GND
R1668 100
R1670 100
R1669 100
R1667 100
R1663 100
R1664 100
R1665 100
R1666 100
R1673 0
D2MD
D1RQ
D2RQ
DSDO
DMT
MUTE
DSDM
VSX-AX5i-S ONLY
R1656 0
R1655 0
VSX-AX3-S ONLY
Level Shift 5V → 3.3V
ERR
ADRT
DRCS
CLK
DRRT
DRDO
IEDO
R1675 0
R1676 0
R1678 0
CNT
L1652 QTL1013
C1653 0.1
IC1653
R1662 150
R1659 150
R1660 150
VSX-AX5i-S ONLY
V−15V
T-AKP062A
D2MD (ADMD)
D1MD (XTLO)
D2RT
D1RT
D1RQ
D1 CS
DSCK (DVD−A)
D2RQ (LSSN)
D2CS
DSDO
DSDI
DMT
MUTE
G
3.3V
A.RET
A.RET
A.5V
A.5V
DSDM
D.RET
D.RET
D.5V
D.5V
V.1394
V.1394
+15V
+15V
G
G
−15V
−15V
OPTIN
G
DOUT
G
ERR
ADRT
DRCS
CLK
DATA
DRDO
DRRT
1394IT
1394DO
1394DI
1394RT
1394CK
1394CS
G
S 1/2 CN102

: The power supply is shown with the marked box.

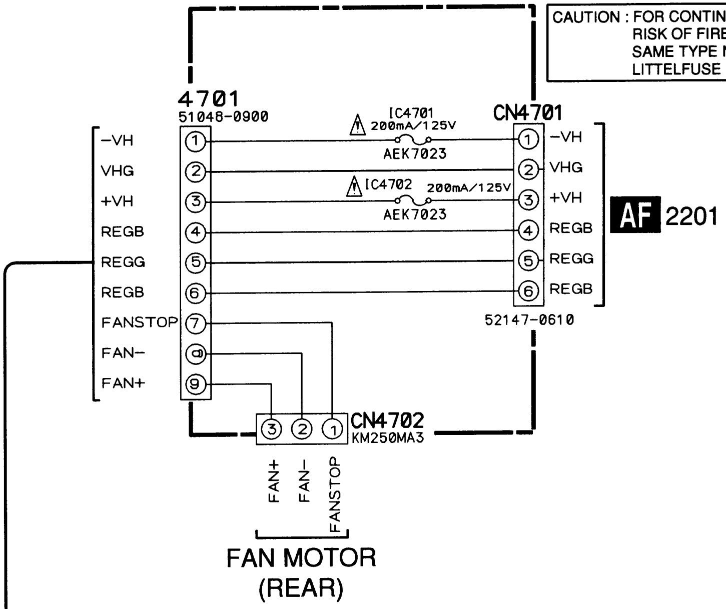
3.12 POWER AMP IN, FAN CONNECTION and FAN DRIVE ASSYS

(F) ➡ : AUDIO SIGNAL ROUTE (FRONT Lch)
(S) ➡ : AUDIO SIGNAL ROUTE (SURROUND Lch)
(SB) ➡ : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)
(C) ➡ : AUDIO SIGNAL ROUTE (CENTER ch)


P POWER AMP IN ASSY (AWX7982)
CN4002
AKP7062
NC
SBR
GNDSBR
SR
GNDSR
FR
GNDFR
C
GNDC
DC DET
OL DET
AMUTE
NC
−VH
−VH
VHG
VHG
+VH
+VH
AA CN4402
CN4001
52044-2445
SBR
GNDSBR
SBL
GNDSBL
SR
GNDSR
SL
GNDSL
C
GNDC
FR
GNDFR
FL
GNDFL
V−15V
DC DET
OL DET
AMUTE
V+5. 6V
TEMP
LOFAN
FAN STOP
GNDU
FAN DRV
L 2/3 CN801
Overload DET.
R4001
10k
2SC2412K
Q4001
YB
C4001
0. 022
R4002
4. 7k
R4003
47k
R4004
1k
D4001
C4002
0. 1
YB
R4009
3. 9k
R4010
0
(SB)
(S)
(F)
(C)
CN4004
KM250MA3L
F. FAN+
F. FAN−
F. FANSTOP
FAN MOTOR (FRONT)
4001
F. FAN+
F. FAN−
F. FANSTOP
FAN STOP
FANDRV
UG
LOFAN
+VH
VHG
−VH
51048-1000
CN4003
AKP7061
SBL
GNDSBL
SL
GNDSL
FL
GNDFL
DC DET
OL DET
AMUTE
TEMP
V+5V
−VH
−VH
VHG
VHG
+VH
+VH
Z CN4401

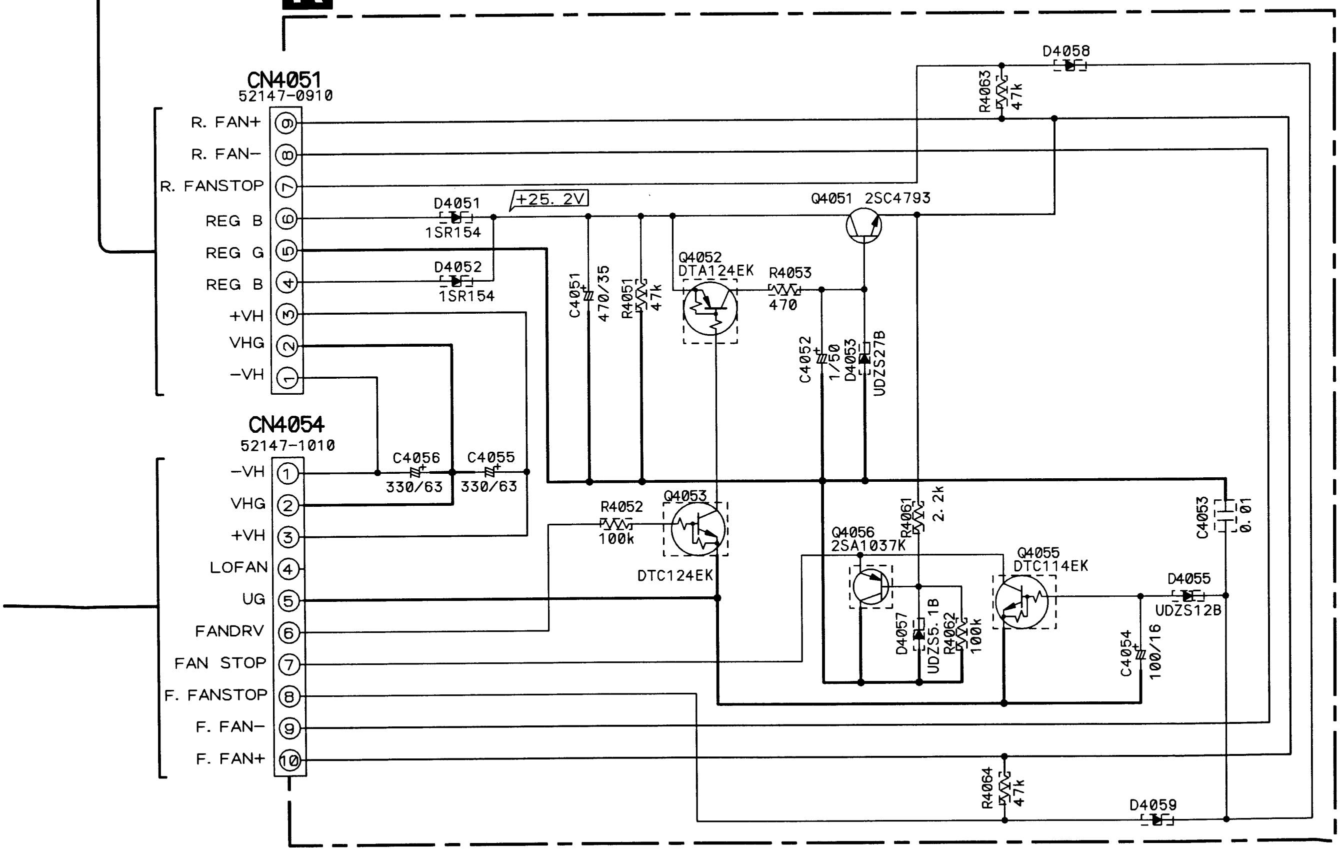
Q FAN CONNECTION ASSY (AWX8005)

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.200 MFD, BY LITTELFUSE INK. FOR IC4701 AND IC4702.

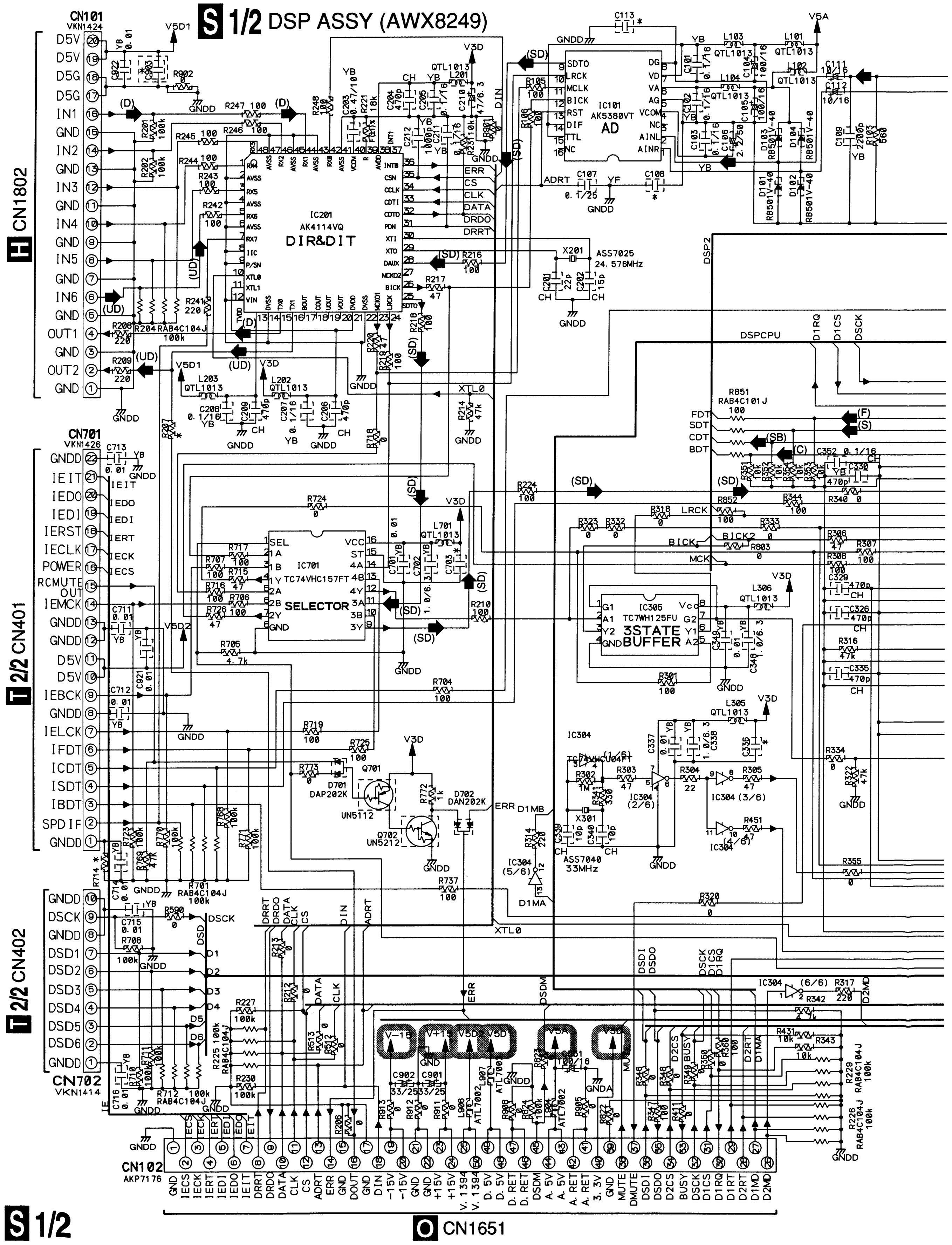

4701
51048-0900
-VH
VHG
+VH
REGB
REGG
REGB
FANSTOP
FAN-
FAN+
IC4701
200mA/125V
AEK7023
IC4702
200mA/125V
AEK7023
CN4701
-VH
VHG
+VH
REGB
REGG
REGB
52147-0610
AF 2201
CN4702
KM250MA3
FAN+
FAN-
FANSTOP
FAN MOTOR
(REAR)

YA	CFTYA□□□J50-T
LA	CFTLA□□□J2A-T
CH	CCSRCH□□□J50-T
YB	CKSRYB□□□K50-T
YF	CKSRYF□□□Z25-T
	1SS355-TRB
	RS1/16S□□□J-T
RDR	RDR1/4VM□□□J-T
(MUF)	RD1/4MUF□□□J-T
3W	RS3LMF□□□J
F	NON-FRAMABLE

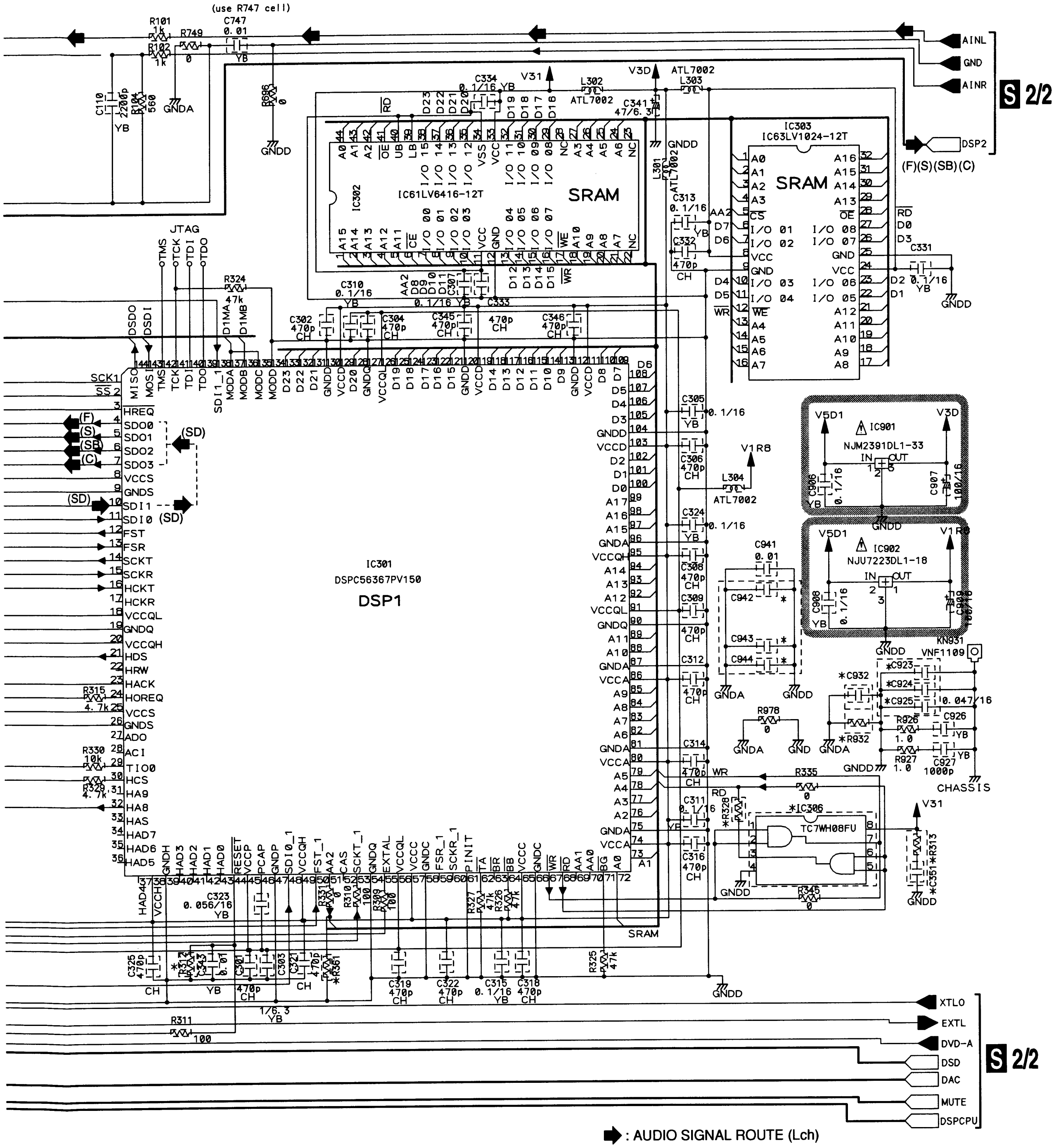
R FAN DRIVE ASSY (AWX8135)


CN4051
52147-0910
R. FAN+
R. FAN-
R. FANSTOP
REG B
REG G
REG B
+VH
VHG
-VH
D4051
1SR154
D4052
1SR154
+25.2V
C4051
470/35
R4051
47k
Q4052
DTA124EK
R4053
470
Q4051 2SC4793
C4052
1/50
D4053
UDZS27B
R4063
47k
D4058
CN4054
52147-1010
-VH
VHG
+VH
LOFAN
UG
FANDRV
FAN STOP
F. FANSTOP
F. FAN-
F. FAN+
C4056
330/63
C4055
330/63
R4052
100k
Q4053
DTC124EK
Q4056
2SA1037K
R4061
2.2k
D4057
UDZS5.1B
R4062
100k
Q4055
DTC114EK
C4054
100/16
D4055
UDZS12B
C4053
0.01
R4064
47k
D4059

3.13 DSP ASSY (1/2)


S 1/2 DSP ASSY (AWX8249)
A
B
C
D
E
F
CN101 VKN1424
H CN1802
D5V 20
D5V 19
D5G 18
D5G 17
IN1 16
GND 15
IN2 14
GND 13
IN3 12
GND 11
IN4 10
GND 9
IN5 8
GND 7
IN6 6
GND 5
OUT1 4
GND 3
OUT2 2
GND 1
V5D1
V3D
V5A
IC201 AK4114VQ DIR&DIT
IC101 AK5380VT AD
SDTO
LRCK
MCLK
BICK
RST
DIF
TTL
NC
DG
VD
VA
AG
VCOM
AINL
AINR
X201 ASS7025 24.576MHz
ERR
CS
CLK
DATA
DRDO
DRRT
ADRT
XTL0
DSP2
DSPCPU
D1RQ
D1CS
DSCK
FDT
SDT
CDT
BDT
LRCK
BICK
BICK2
MCK
R851 RAB4C101J
CN701 VKN1426
T 2/2 CN401
GNDD 22
IEIT 21
IEDO 20
IEDI 19
IERST 18
IECLK 17
POWER 16
RCMUTE OUT 15
IEMCK 14
GNDD 13
GNDD 12
D5V 11
D5V 10
IEBCK 9
GNDD 8
IELCK 7
IFDT 6
ICDT 5
ISDT 4
IBDT 3
SPDIF 2
GNDD 1
IC701 TC74VHC157FT SELECTOR
IC305 TC7WH125FU 3STATE BUFFER
IC304 TC74VHCU04FT
X301 ASS7040 33MHz
Q701 UN5112
Q702 UN5212
D701 DAP202K
D702 DAN202K
D1MB
D1MA
T 2/2 CN402
CN702 VKN1414
GNDD 10
DSCK 9
GNDD 8
DSD1 7
DSD2 6
DSD3 5
DSD4 4
DSD5 3
DSD6 2
GNDD 1
V-15
V+15
V5D2
V5D
V5A
V3D
CN102 AKP7176
GND
IECS
IECK
IERT
IEDI
IEDO
IEIT
DRRT
DRDO
DATA
CLK
CS
ADRT
ERR
GND
DOUT
GND
DIN
-15V
-15V
GND
GND
+15V
+15V
V.1394
V.1394
D.5V
D.5V
D.RET
D.RET
DSDM
A.5V
A.5V
A.RET
A.RET
3.3V
GND
MUTE
DMUTE
DSDI
DSDO
D2CS
BUSY
DSCK
D1CS
D1RQ
D1RT
D2RT
D1MD
D2MD
O CN1651
S 1/2

: The power supply is shown with the marked box.


R101 1k
R102 1k
R749 0
C747 0.01 YB
(use R747 cell)
C110 2200p YB
R104 560
GNDA
R696 0
GNDD
AINL
GND
AINR
DSP2
(F)(S)(SB)(C)
S 2/2
C334 0.1/16 YB
V31
L302 ATL7002
V3D
L303 ATL7002
C341 47/6.3
IC302
IC61LV6416-12T
SRAM
L301 ATL7002
C313 0.1/16
C332 470p CH
IC303
IC63LV1024-12T
SRAM
C331 0.1/16 YB
JTAG
TMS
TCK
TDI
TDO
R324 47k
DSDO
DSDI
D1MA
D1MB
C310 0.1/16 YB
C302 470p CH
C304 470p CH
C345 470p CH
C333
C346 470p CH
C307 0.1/16
C305 0.1/16 YB
C306 470p CH
V1R8
L304 ATL7002
C324 0.1/16 YB
C308 470p CH
C309
C312 470p CH
C314 470p CH
C311 0.1/16
C316 470p CH
IC301
DSPC56367PV150
DSP1
SRAM
IC901 NJM2391DL1-33
V5D1
V3D
C905 0.1/16 YB
C907 100/16
IC902 NJU7223DL1-18
V5D1
V1R8
C908 0.1/16 YB
C909 100/16
C941 0.01
C942
C943
C944
GNDA
GNDD
KN931 VNF1109
C923
C924
C925
C926 YB
C927 1000p YB
0.047/16
C932
R932
R926 1.0
R927 1.0
R978 0
CHASSIS
R335 0
R328
IC306
TC7WH08FU
R345 0
V31
R313
C351
R315 4.7k
R330 10k
R329 4.7k
C323 0.056/16 YB
C325 470p CH
R312
C343
C301 0.01 YB
C303
C321 470p CH
R361
R331
R310 100
R309 100
R327 47k
R326 47k
R328 47k
C319 470p CH
C322 470p CH
C315 0.1/16 YB
C318 470p CH
R325 47k
R311 100
1/6.3 YB
XTLO
EXTL
DVD-A
DSD
DAC
MUTE
DSPCPU
S 2/2

➡ : AUDIO SIGNAL ROUTE (Lch)

(F) ➡ : AUDIO SIGNAL ROUTE (FRONT Lch)

(S) ➡ : AUDIO SIGNAL ROUTE (SURROUND Lch)

(SB) ➡ : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)

(C) ➡ : AUDIO SIGNAL ROUTE (CENTER ch)

(SD) ➡ : SURROUND DATA SIGNAL ROUTE

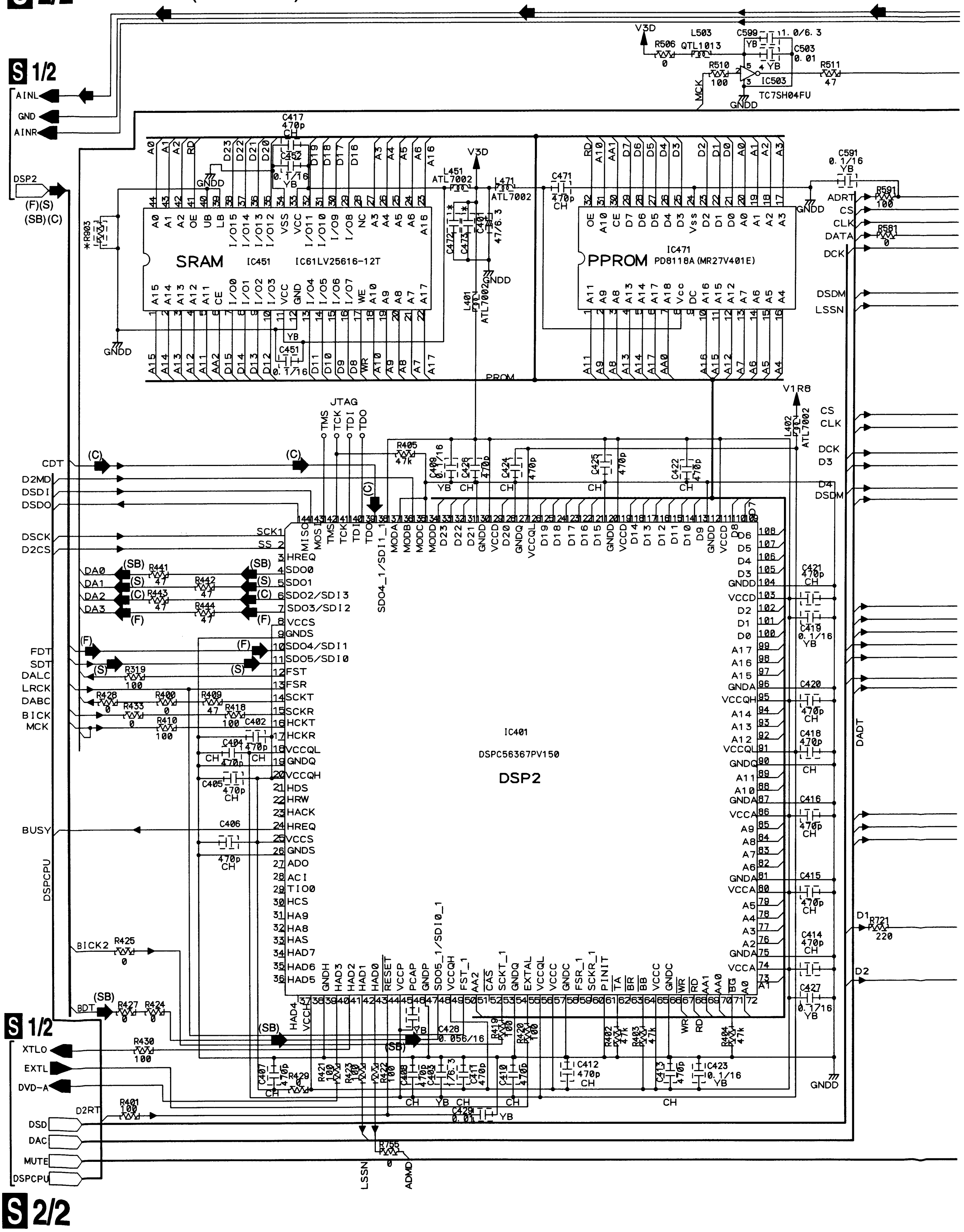
(D) ➡ : AUDIO SIGNAL ROUTE (DIGITAL)

(UD) ➡ : AUDIO SIGNAL ROUTE (USB DIGITAL)

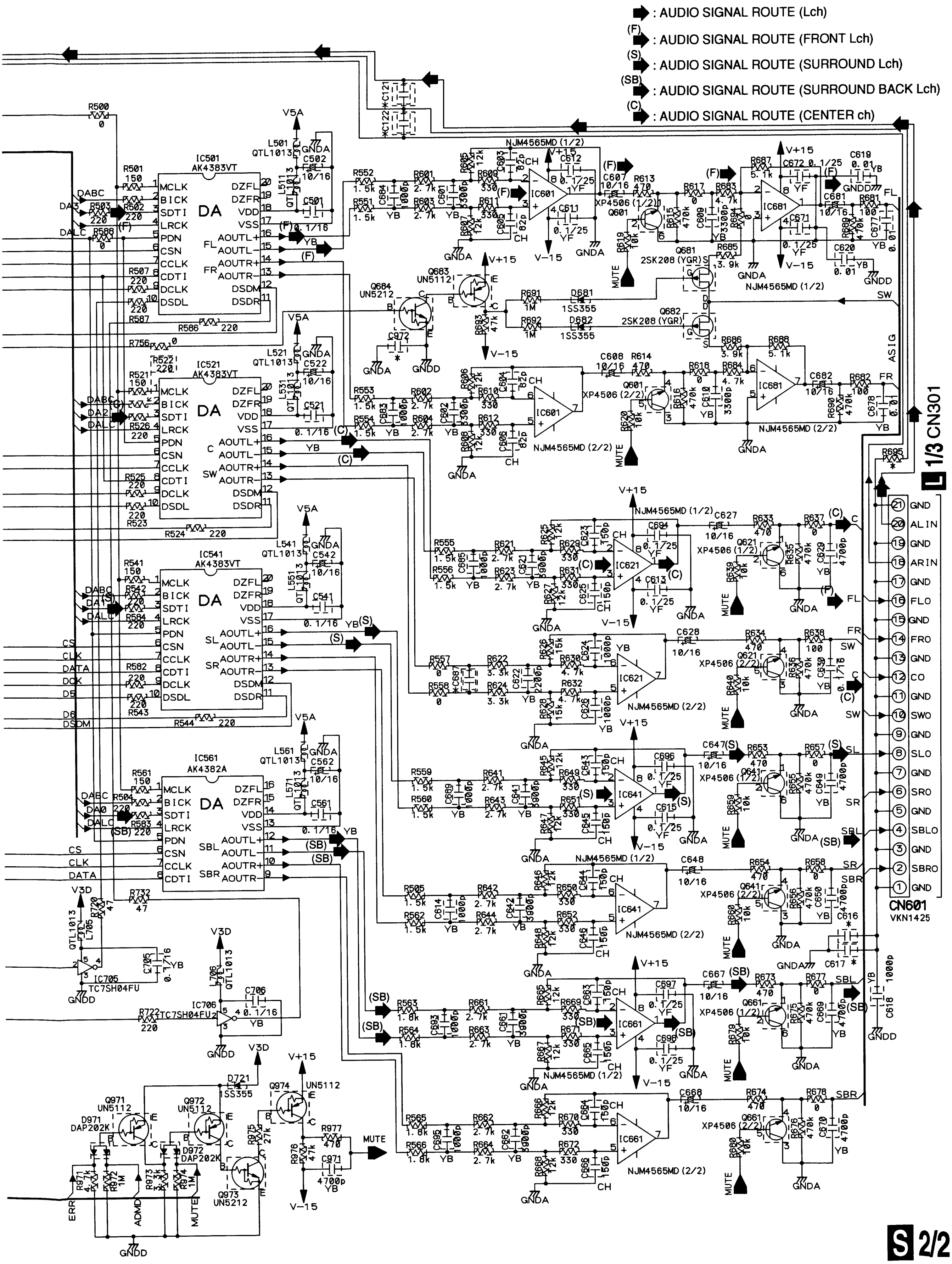
S 1/2

3.14 DSP ASSY (2/2)

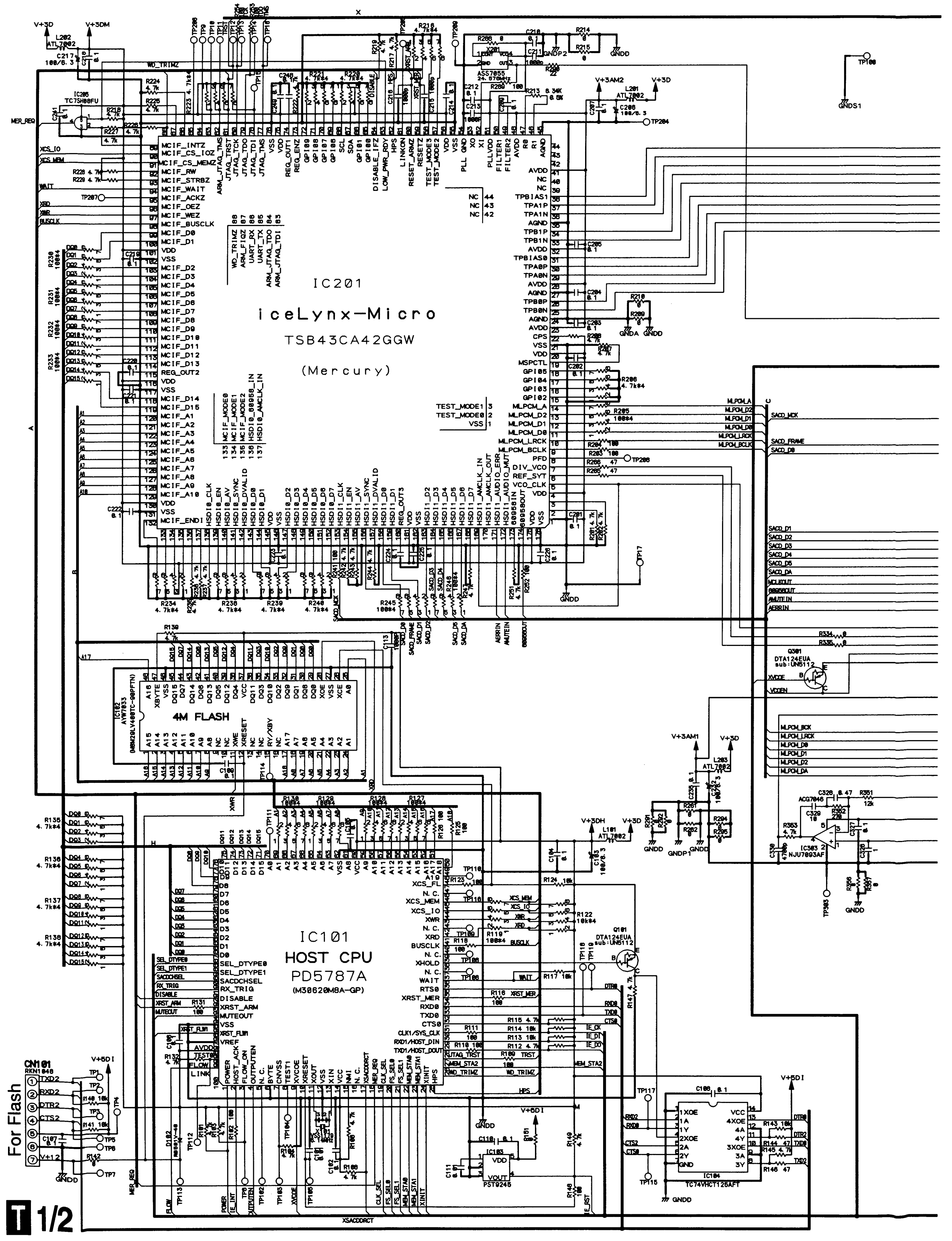
S 2/2 DSP ASSY (AWX8249)



S 1/2
AINL
GND
AINR
DSP2
(F)(S)
(SB)(C)
V3D
R506 0
L503 QTL1013
C599 1.0/6.3 YB
C503 0.01
R510 100
IC503 TC7SH04FU
R511 47
MCK
GNDD
C417 470p CH
C452 0.1/16 YB
L451 ATL7002
L471 ATL7002
C471 470p CH
C472 C473 C401 47/6.3
L401 ATL7002
C591 0.1/16 YB
*R903
SRAM
IC451 IC61LV25616-12T
PPROM
IC471 PD8118A (MR27V401E)
C451 0.1/16 YB
PROM
ADRT
CS
CLK
DATA
DCK
R591 100
R581 0
DSDM
LSSN
JTAG
TMS TCK TDI TDO
V1R8
L402 ATL7002
R405 47k
C409 0.1/16 YB
C426 470p CH
C424 470p CH
C425 470p CH
C422 470p CH
CDT
D2MD
DSDI
DSDO
DSCK
D2CS
DA0 DA1 DA2 DA3
R441 47
R442 47
R443 47
R444 47
FDT
SDT
DALC
LRCK
DABC
BICK
MCK
R319 100
R428 0
R400 0
R433 0
R409 47
R418 100
R410 100
C402
C404 470p CH
C403 470p CH
C405 470p CH
C406 470p CH
BUSY
DSPCPU
BICK2
R425 0
BDT
R427 0
R424 0
IC401
DSPC56367PV150
DSP2
C421 470p CH
C419 0.1/16 YB
C420 470p CH
C418 470p CH
C416 470p CH
C415 470p CH
C414 470p CH
C427 0.1/16 YB
DADT
D1
R721 220
D2
GNDD
XTLO
EXTL
DVD-A
R430 100
D2RT
R401 100
DSD
DAC
MUTE
DSPCPU
C407 470p CH
R429 0
R421 100
R423 100
R422 100
C408 470p CH
C403 1/6.3 YB
C411 470p CH
C410 470p CH
C428 0.056/16
R419 100
R420 100
R402 47k
R403 47k
R404 47k
C412 470p CH
C413 470p CH
C423 0.1/16 YB
C429 0.01 YB
R755 0
LSSN
ADMD
S 2/2

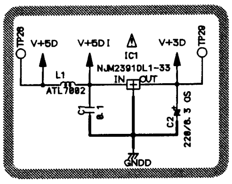

: AUDIO SIGNAL ROUTE (Lch)
(F) : AUDIO SIGNAL ROUTE (FRONT Lch)
(S) : AUDIO SIGNAL ROUTE (SURROUND Lch)
(SB) : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)
(C) : AUDIO SIGNAL ROUTE (CENTER ch)
IC501 AK4383VT
IC521 AK4383VT
IC541 AK4383VT
IC561 AK4382A
DA
MCLK
BICK
SDTI
LRCK
PDN
CSN
CCLK
CDTI
DCLK
DSDL
DZFL
DZFR
VDD
VSS
AOUTL+
AOUTL-
AOUTR+
AOUTR-
DSDM
DSDR
FL
FR
C
SW
SL
SR
SBL
SBR
V5A
L501 QTL1013
L521 QTL1013
L541 QTL1013
L561 QTL1013
GNDA
GNDD
V+15
V-15
IC601 NJM4565MD (1/2)
IC601 NJM4565MD (2/2)
IC681 NJM4565MD (1/2)
IC681 NJM4565MD (2/2)
IC621 NJM4565MD (1/2)
IC621 NJM4565MD (2/2)
IC641 NJM4565MD (1/2)
IC641 NJM4565MD (2/2)
IC661 NJM4565MD (1/2)
IC661 NJM4565MD (2/2)
Q601 XP4506 (1/2)
Q601 XP4506 (2/2)
Q621 XP4506 (1/2)
Q621 XP4506 (2/2)
Q641 XP4506 (1/2)
Q641 XP4506 (2/2)
Q661 XP4506 (1/2)
Q661 XP4506 (2/2)
Q681 2SK208 (YGR)
Q682 2SK208 (YGR)
Q683 UN5112
Q684 UN5212
D681 1SS355
D682 1SS355
MUTE
ASIG
SW
CN601 VKN1425
1/3 CN301
21 GND
20 ALIN
19 GND
18 ARIN
17 GND
16 FLO
15 GND
14 FRO
13 GND
12 CO
11 GND
10 SWO
9 GND
8 SLO
7 GND
6 SRO
5 GND
4 SBLO
3 GND
2 SBRO
1 GND
CS
CLK
DATA
DCK
D5
D6
DSDM
DABC
DA3
DA2
DA1
DA0
DALC
V3D
IC705 TC7SH04FU
IC706 TC7SH04FU
L705 QTL1013
L706 QTL1013
Q971 UN5112
Q972 UN5112
Q973 UN5212
Q974 UN5112
D971 DAP202K
D972 DAP202K
D721 1SS355
ERR
ADMD
MUTE
C121
C122
C617
C618

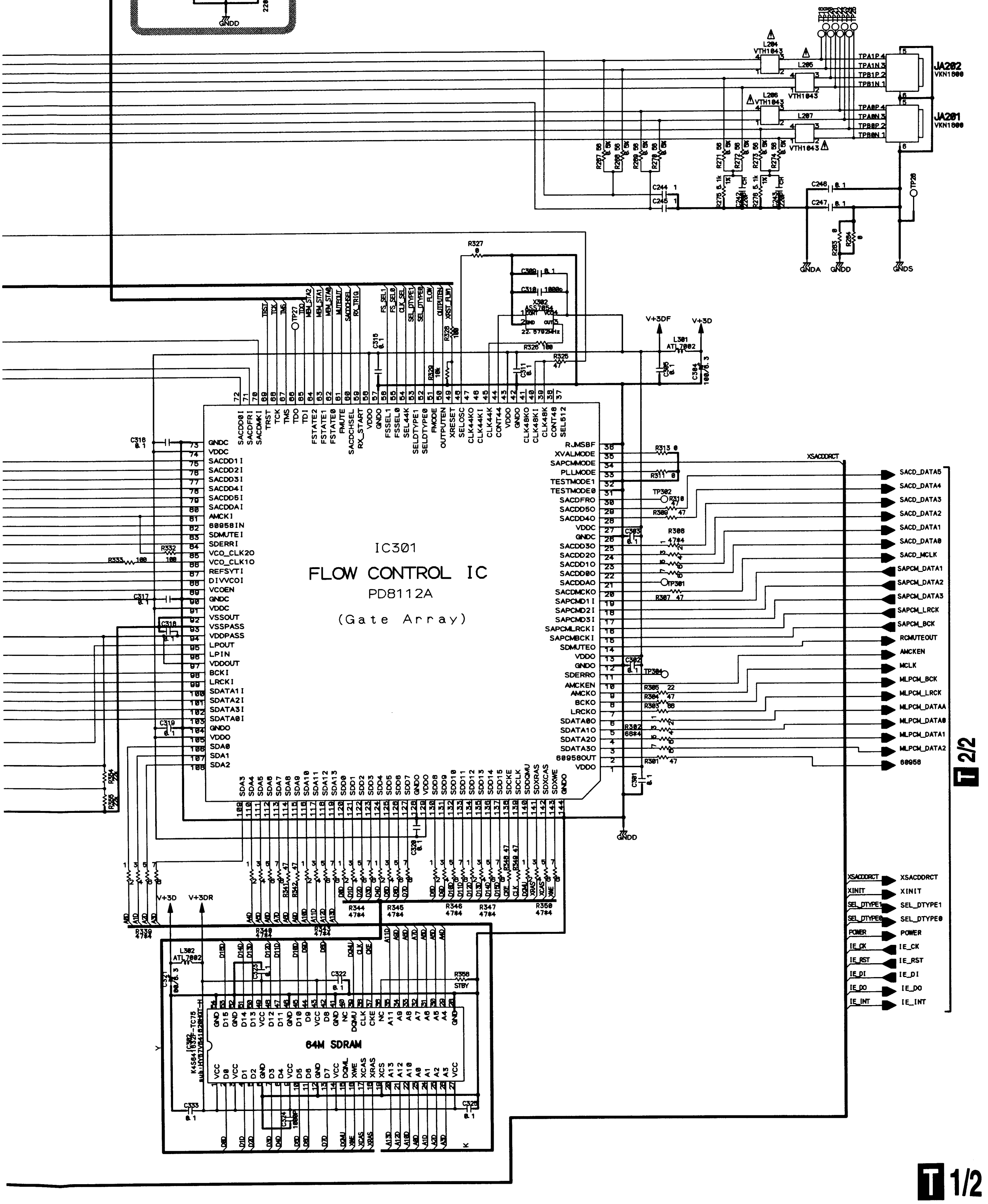
3.15 1394 ASSY (1/2) (VSX-AX5i-S ONLY)


A
B
C
D
E
F
IC201
iceLynx−Micro
TSB43CA42GGW
(Mercury)
IC101
HOST CPU
PD5787A
(M30620M8A-GP)
IC102
AYW7033
4M FLASH
IC205
TC7SH08FU
X201
ASS7055
IC103
PST9245
IC104
TC74VHCT125AFT
IC303
NJU7093AF
Q301
DTA124EUA
sub:UN5112
Q101
DTA124EUA
sub:UN5112
CN101
RKN1048
TXD2
RXD2
DTR2
CTS2
V+12
For Flash
V+3D
V+3DM
V+3AM2
V+3AM1
V+3DH
V+5DI
GNDD
GNDA
GNDP1
GNDP2
GNDS1
T 1/2

T 1/2 1394 ASSY (AWK7768)

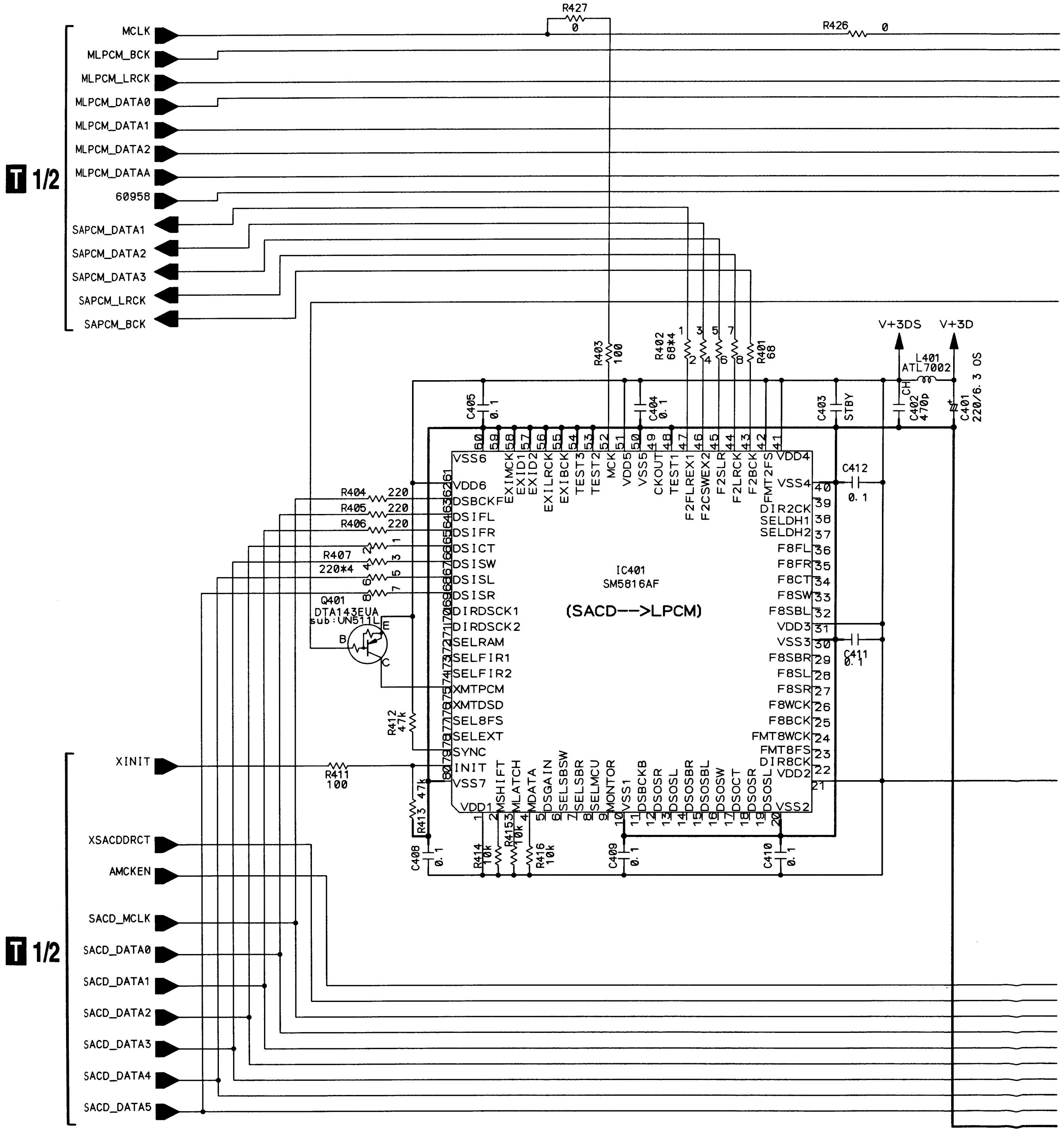
: The power supply is shown with the marked box.


TP28
V+5D
V+5DI
IC1
NJM2391DL1-33
V+3D
TP29
L1
ATL7002
IN
OUT
C1 0.1
C2 220/6.3 GS
GNDD


JA202
VKN1800
JA201
VKN1800
L204 VTH1043
L205
L206 VTH1043
L207
TPA1P
TPA1N
TPB1P
TPB1N
TPA0P
TPA0N
TPB0P
TPB0N
GNDA
GNDD
GNDS
IC301
FLOW CONTROL IC
PD8112A
(Gate Array)
X302
22.5792MHz
V+3DF
V+3D
L301
ATL7002
XSACDDRCT
SACD_DATA5
SACD_DATA4
SACD_DATA3
SACD_DATA2
SACD_DATA1
SACD_DATA0
SACD_MCLK
SAPCM_DATA1
SAPCM_DATA2
SAPCM_DATA3
SAPCM_LRCK
SAPCM_BCK
RCMUTEOUT
AMCKEN
MCLK
MLPCM_BCK
MLPCM_LRCK
MLPCM_DATAA
MLPCM_DATA0
MLPCM_DATA1
MLPCM_DATA2
60958
T 2/2
XSACDDRCT
XINIT
SEL_DTYPE1
SEL_DTYPE0
POWER
IE_CK
IE_RST
IE_DI
IE_DO
IE_INT
64M SDRAM
V+3D
V+3DR
L302
ATL7002
STBY

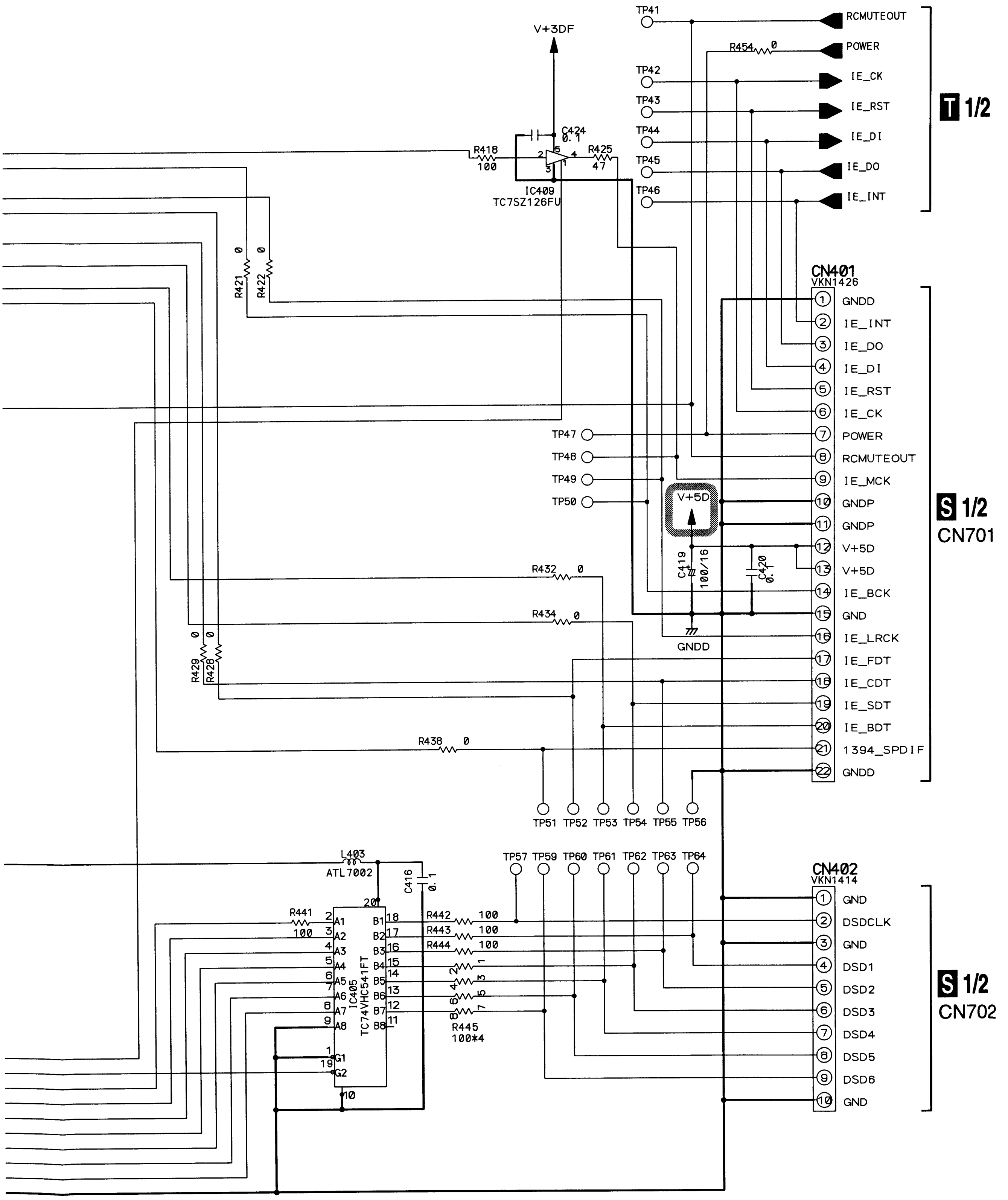
3.16 1394 ASSY (2/2) (VSX-AX5i-S ONLY)

T 2/2 1394 ASSY (AWK7768)



A
B
C
D
E
F
T 1/2
MCLK
MLPCM_BCK
MLPCM_LRCK
MLPCM_DATA0
MLPCM_DATA1
MLPCM_DATA2
MLPCM_DATAA
60958
SAPCM_DATA1
SAPCM_DATA2
SAPCM_DATA3
SAPCM_LRCK
SAPCM_BCK
R427 0
R426 0
V+3DS
V+3D
R403 100
R402 68*4
R401 68
L401 ATL7002
C405 0.1
C404 0.1
C403 STBY
CH C402 470p
C401 220/6.3 OS
C412 0.1
C411 0.1
R404 220
R405 220
R406 220
R407 220*4
Q401 DTA143EUA sub:UN511L
E
B
C
R412 47k
R413 47k
R411 100
C408 0.1
R414 10k
R415 10k
R416 10k
C409 0.1
C410 0.1
IC401 SM5816AF
(SACD-->LPCM)
VSS6
EXIMCK
EXID1
EXID2
EXILRCK
EXIBCK
TEST3
TEST2
MCK
VDD5
VSS5
CKOUT
TEST1
F2FLREX1
F2CSWEX2
F2SLR
F2LRCK
F2BCK
FMT2FS
VDD4
VSS4
DIR2CK
SELDH1
SELDH2
F8FL
F8FR
F8CT
F8SW
F8SBL
VDD3
VSS3
F8SBR
F8SL
F8SR
F8WCK
F8BCK
FMT8WCK
FMT8FS
DIR8CK
VDD2
VSS2
VDD6
DSBCKF
DSIFL
DSIFR
DSICT
DSISW
DSISL
DSISR
DIRDSCK1
DIRDSCK2
SELRAM
SELFIR1
SELFIR2
XMTPCM
XMTDSD
SEL8FS
SELEXT
SYNC
INIT
VSS7
VDD1
MSHIFT
MLATCH
MDATA
DSGAIN
SELSBSW
SELSBR
SELMCU
MONTOR
VSS1
DSBCKB
DSOSR
DSOSL
DSOSBR
DSOSBL
DSOSW
DSOCT
DSOSR
DSOSL
XINIT
XSACDDRCT
AMCKEN
SACD_MCLK
SACD_DATA0
SACD_DATA1
SACD_DATA2
SACD_DATA3
SACD_DATA4
SACD_DATA5

T 2/2


V+3DF
TP41
RCMUTEOUT
R454 0
POWER
TP42
IE_CK
TP43
IE_RST
TP44
IE_DI
TP45
IE_DO
TP46
IE_INT
T 1/2
C424 0.1
R418 100
R425 47
IC409
TC7SZ126FU
R421 0
R422 0
CN401
VKN1426
1 GNDD
2 IE_INT
3 IE_DO
4 IE_DI
5 IE_RST
6 IE_CK
7 POWER
8 RCMUTEOUT
9 IE_MCK
10 GNDP
11 GNDP
12 V+5D
13 V+5D
14 IE_BCK
15 GND
16 IE_LRCK
17 IE_FDT
18 IE_CDT
19 IE_SDT
20 IE_BDT
21 1394_SPDIF
22 GNDD
S 1/2
CN701
TP47
TP48
TP49
TP50
V+5D
C419 100/16
C420 0.1
GNDD
R432 0
R434 0
R429 0
R428 0
R438 0
TP51 TP52 TP53 TP54 TP55 TP56
L403
ATL7002
C416 0.1
TP57 TP59 TP60 TP61 TP62 TP63 TP64
CN402
VKN1414
1 GND
2 DSDCLK
3 GND
4 DSD1
5 DSD2
6 DSD3
7 DSD4
8 DSD5
9 DSD6
10 GND
S 1/2
CN702
R441 100
IC405
TC74VHC541FT
A1 A2 A3 A4 A5 A6 A7 A8
B1 B2 B3 B4 B5 B6 B7 B8
G1 G2
R442 100
R443 100
R444 100
R445
100*4

▢ : The power supply is shown with the marked box.

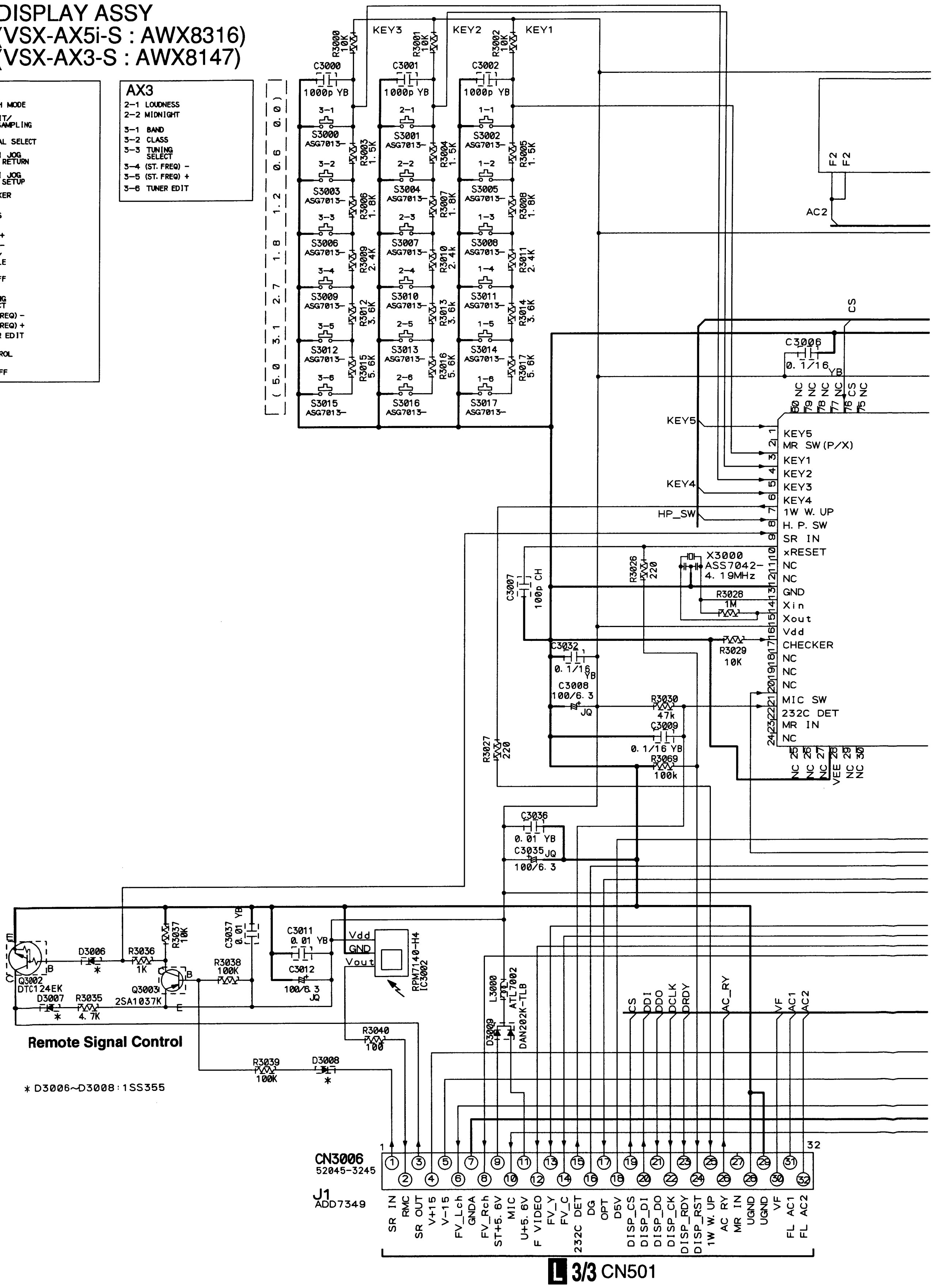
T 2/2

3.17 DISPLAY ASSY

U DISPLAY ASSY
(VSX-AX5i-S : AWX8316)
(VSX-AX3-S : AWX8147)

AX5i	
1–1	SB CH MODE
1–2	HI-BIT/ HI-SAMPLING
1–3	SIGNAL SELECT
1–4	MULTI JOG CONT. RETURN
1–5	MULTI JOG CONT. SETUP
1–6	SPEAKER
2–1	CLASS
2–2	BAND
2–3	TONE +
2–4	TONE –
2–5	BASS/ TREBLE
2–6	TONE ON/OFF
3–1	TUNING SELECT
3–2	(ST. FREQ) –
3–3	(ST. FREQ) +
3–4	TUNER EDIT
3–5	MR&S CONTROL
3–6	MR&S ON/OFF

AX3	
2–1	LOUDNESS
2–2	MIDNIGHT
3–1	BAND
3–2	CLASS
3–3	TUNING SELECT
3–4	(ST. FREQ) –
3–5	(ST. FREQ) +
3–6	TUNER EDIT

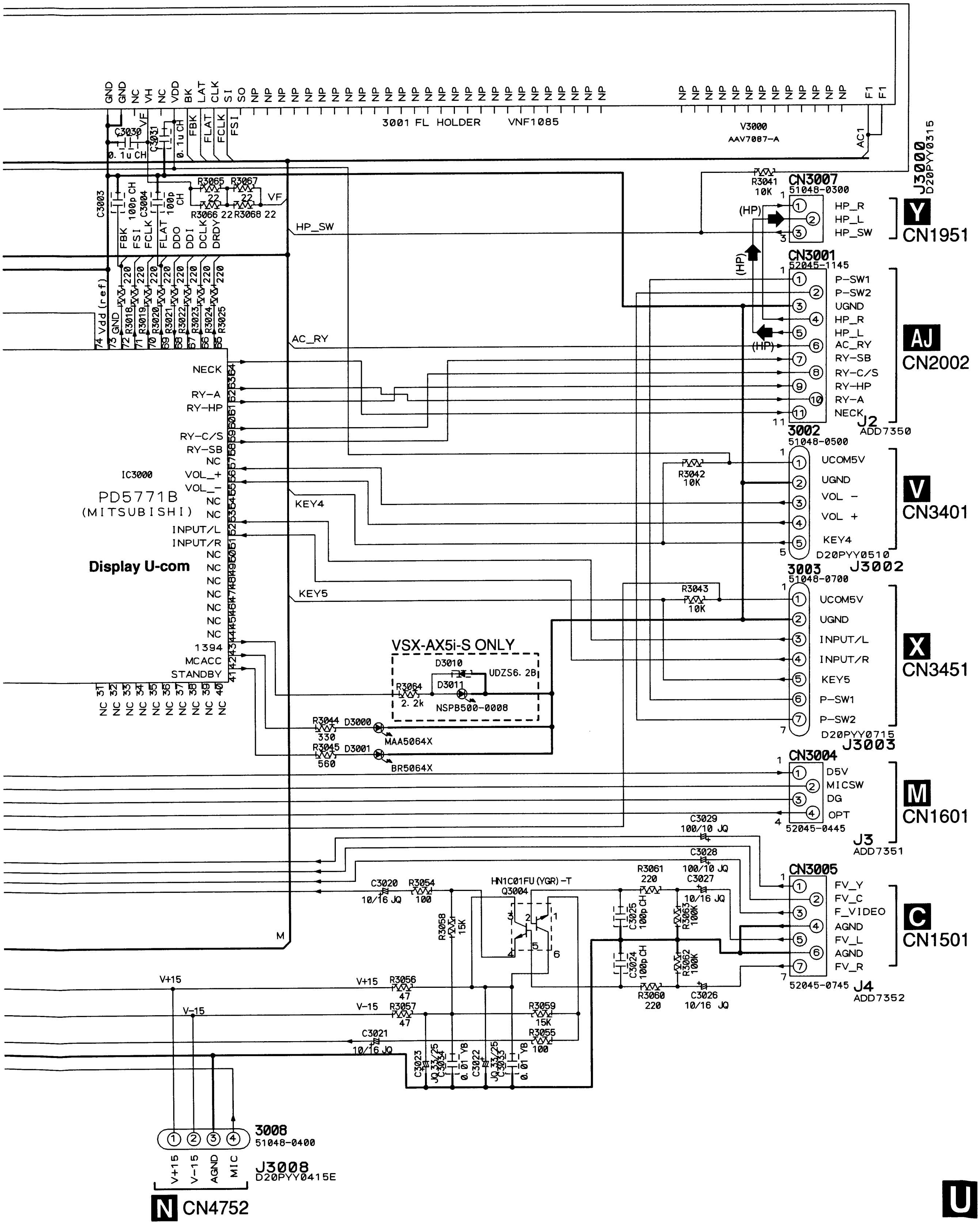


(0.0)
(0.6)
(1.2)
(1.8)
(2.7)
(3.1)
(5.0)
KEY3
KEY2
KEY1
R3000 10K
R3001 10K
R3002 10K
C3000 1000p YB
C3001 1000p YB
C3002 1000p YB
3-1 S3000 ASG7013
2-1 S3001 ASG7013
1-1 S3002 ASG7013
R3003 1.5K
R3004 1.5K
R3005 1.5K
3-2 S3003 ASG7013
2-2 S3004 ASG7013
1-2 S3005 ASG7013
R3006 1.8K
R3007 1.8K
R3008 1.8K
3-3 S3006 ASG7013
2-3 S3007 ASG7013
1-3 S3008 ASG7013
R3009 2.4K
R3010 2.4k
R3011 2.4K
3-4 S3009 ASG7013
2-4 S3010 ASG7013
1-4 S3011 ASG7013
R3012 3.6K
R3013 3.6K
R3014 3.6K
3-5 S3012 ASG7013
2-5 S3013 ASG7013
1-5 S3014 ASG7013
R3015 5.6K
R3016 5.6K
R3017 5.6K
3-6 S3015 ASG7013
2-6 S3016 ASG7013
1-6 S3017 ASG7013
F2
F2
AC2
CS
C3006 0.1/16 YB
80 NC
79 NC
78 NC
77 NC
76 CS
75 NC
KEY5
KEY4
HP_SW
1 KEY5
2 MR SW (P/X)
3 KEY1
4 KEY2
5 KEY3
6 KEY4
7 1W W. UP
8 H. P. SW
9 SR IN
10 xRESET
11 NC
12 NC
13 GND
14 Xin
15 Xout
16 Vdd
17 CHECKER
18 NC
19 NC
20 NC
21 MIC SW
22 232C DET
23 MR IN
24 NC
25 NC
26 NC
27 NC
28 VEE
29 NC
30 NC
X3000 ASS7042- 4.19MHz
R3026 220
R3028 1M
R3029 10K
C3007 100p CH
C3032 0.1/16 YB
C3008 100/6.3 JQ
R3030 47k
C3009 0.1/16 YB
R3069 100k
R3027 220
C3036 0.01 YB
C3035 JQ 100/6.3
Q3002 DTC124EK
D3006
R3036 1K
R3037 10K
Q3003 2SA1037K
D3007
R3035 4.7K
C3037 0.01 YB
R3038 100K
C3011 0.01 YB
C3012 100/6.3 JQ
Vdd
GND
Vout
RPM7140-H4 IC3002
R3040 100
R3039 100K
D3008
L3000 ATL7002
D3009 DAN202K-TLB
CS
DDI
DDO
DCLK
DRDY
AC_RY
VF
AC1
AC2
CN3006 52045-3245
J1 ADD7349
1 SR IN
2 RMC
3 SR OUT
4 V+15
5 V-15
6 FV_Lch
7 GNDA
8 FV_Rch
9 ST+5.6V
10 MIC
11 U+5.6V
12 F VIDEO
13 FV_Y
14 FV_C
15 232C DET
16 DG
17 OPT
18 D5V
19 DISP_CS
20 DISP_DI
21 DISP_DO
22 DISP_CK
23 DISP_RDY
24 DISP_RST
25 1W W.UP
26 AC RY
27 MR IN
28 UGND
29 UGND
30 VF
31 FL AC1
32 FL AC2
L 3/3 CN501

Remote Signal Control

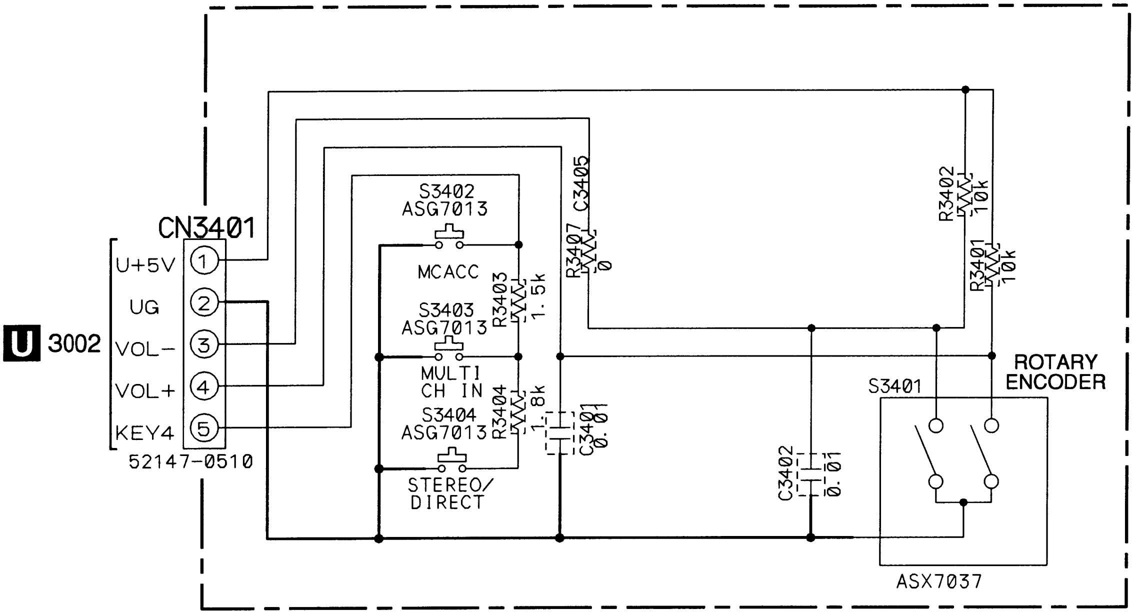
∗ D3006~D3008 : 1SS355

(HP) : AUDIO SIGNAL ROUTE (PHONES ch)

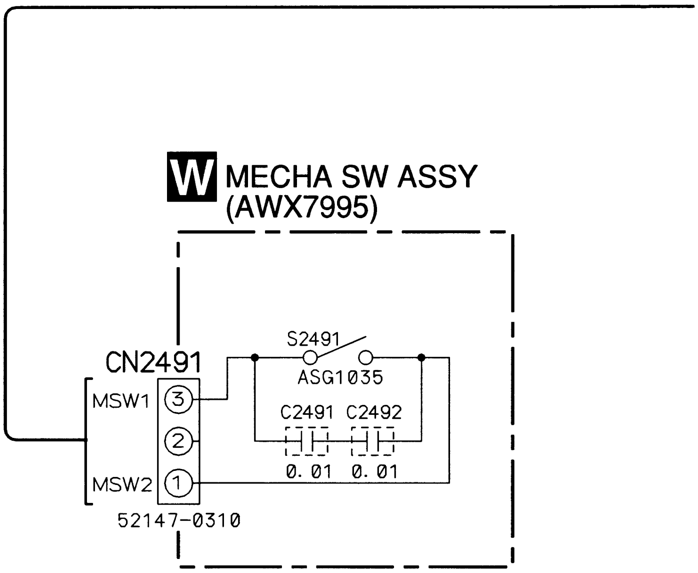

GND
GND
NC
VH
NC
VDD
BK
LAT
CLK
SI
SO
NP
F1
F1
3001 FL HOLDER
VNF1085
V3000
AAV7087-A
AC1
J3000
D20PYY0315
C3030
0.1u CH
C3031
0.1u CH
VF
FBK
FLAT
FCLK
FSI
C3003
100p CH
C3004
100p CH
R3065 22
R3067 22
R3066 22
R3068 22
DDO
DDI
DCLK
DRDY
HP_SW
R3018 220
R3019 220
R3020 220
R3021 220
R3022 220
R3023 220
R3024 220
R3025 220
74 Vdd (ref)
73 GND
AC_RY
NECK
RY-A
RY-HP
RY-C/S
RY-SB
NC
IC3000
VOL_+
VOL_-
PD5771B
(MITSUBISHI)
KEY4
INPUT/L
INPUT/R
Display U-com
KEY5
1394
MCACC
STANDBY
VSX-AX5i-S ONLY
D3010
UDZS6. 2B
D3011
R3064
2. 2k
NSPB500-0008
R3044 330
D3000
MAA5064X
R3045 560
D3001
BR5064X
R3041 10K
CN3007
51048-0300
HP_R
HP_L
HP_SW
Y
CN1951
(HP)
CN3001
52045-1145
P-SW1
P-SW2
UGND
HP_R
HP_L
AC_RY
RY-SB
RY-C/S
RY-HP
RY-A
NECK
AJ
CN2002
J2
ADD7350
3002
51048-0500
R3042 10K
UCOM5V
UGND
VOL -
VOL +
KEY4
V
CN3401
D20PYY0510
J3002
3003
51048-0700
R3043 10K
UCOM5V
UGND
INPUT/L
INPUT/R
KEY5
P-SW1
P-SW2
X
CN3451
D20PYY0715
J3003
CN3004
D5V
MICSW
DG
OPT
52045-0445
M
CN1601
J3
ADD7351
C3029 100/10 JQ
C3028 100/10 JQ
C3027 10/16 JQ
CN3005
FV_Y
FV_C
F_VIDEO
AGND
FV_L
AGND
FV_R
C
CN1501
52045-0745
J4
ADD7352
R3061 220
C3025 100p CH
R3063 100K
C3024 100p CH
R3062 100K
R3060 220
C3026 10/16 JQ
C3020 10/16 JQ
R3054 100
HN1C01FU (YGR) -T
Q3004
R3058 15K
M
V+15
V-15
R3056 47
R3057 47
R3059 15K
R3055 100
C3021 10/16 JQ
C3023 JQ 33/25
C3034 0.01 YB
C3022 JQ 33/25
C3033 0.01 YB
3008
51048-0400
V+15
V-15
AGND
MIC
J3008
D20PYY0415E
N
CN4752

3.18 VOLUME, MECHA SW, MULTI JOG and HEADPHONE ASSYS

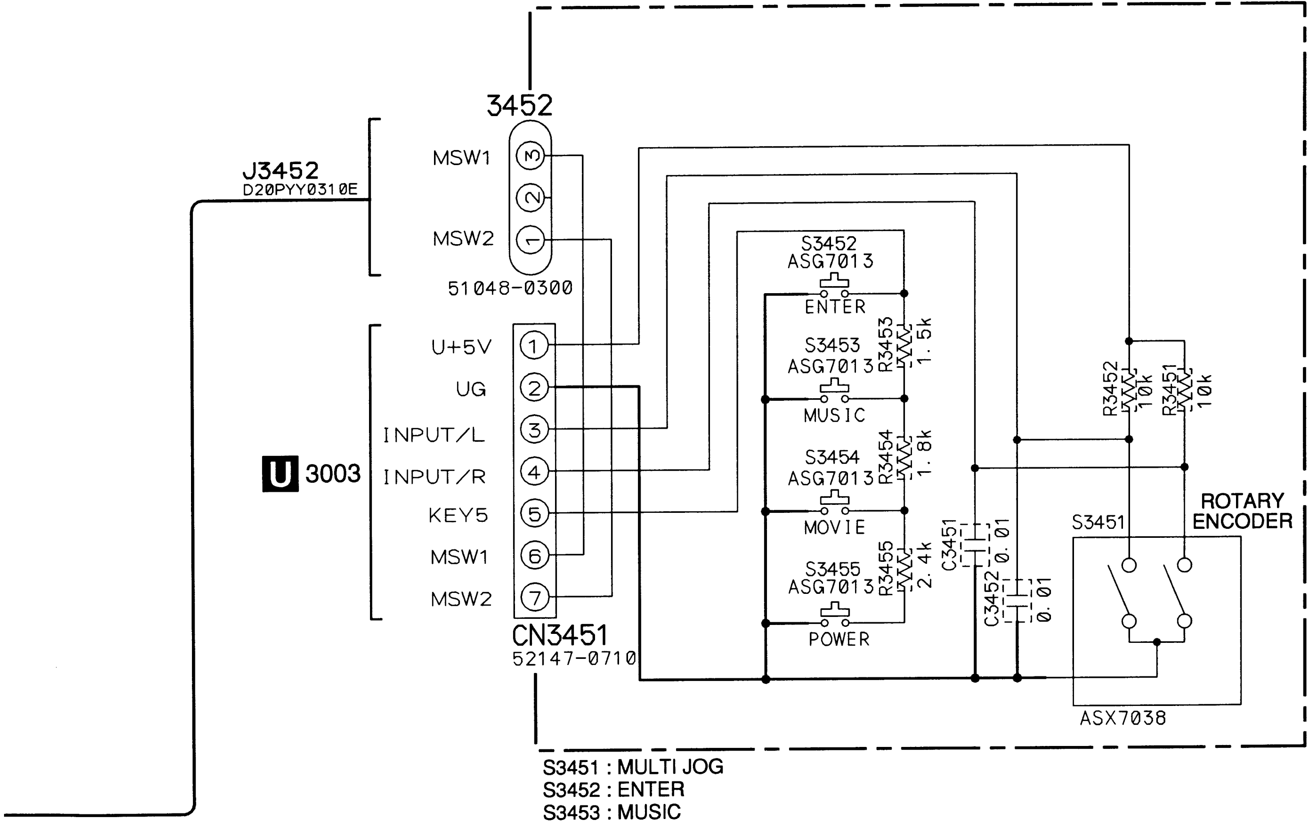
V VOLUME ASSY (AWX7971)


U 3002
CN3401
U+5V ①
UG ②
VOL− ③
VOL+ ④
KEY4 ⑤
52147-0510
S3402
ASG7013
MCACC
S3403
ASG7013
MULTI CH IN
S3404
ASG7013
STEREO/DIRECT
R3403 1.5k
R3404 1.8k
C3401 0.01
R3407 0
C3405
R3402 10k
R3401 10k
C3402 0.01
S3401
ROTARY ENCODER
ASX7037

S3401 : MASTER VOLUME
S3402 : ACOUSTIC EQ
S3403 : MULTI CH IN
S3404 : STEREO/DIRECT

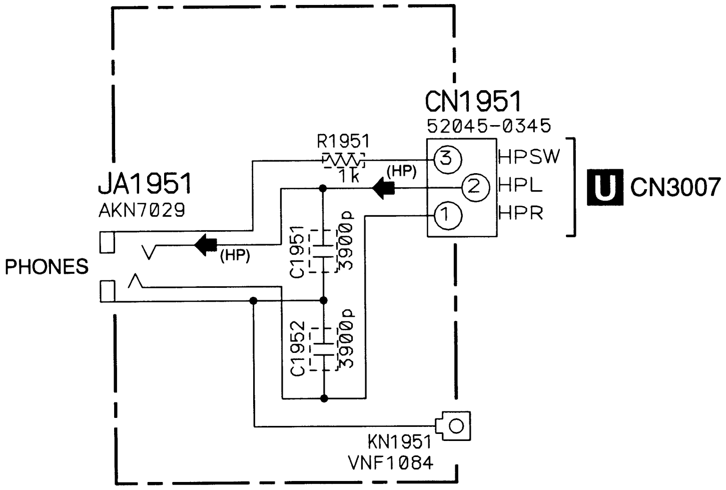

W MECHA SW ASSY (AWX7995)
CN2491
MSW1 ③
②
MSW2 ①
52147-0310
S2491
ASG1035
C2491
C2492
0.01
0.01

X MULTI JOG ASSY (AWX8015)


3452
MSW1
MSW2
51048-0300
J3452
D20PYY0310E
U+5V
UG
INPUT/L
INPUT/R
KEY5
MSW1
MSW2
U 3003
CN3451
52147-0710
S3452
ASG7013
ENTER
S3453
ASG7013
MUSIC
S3454
ASG7013
MOVIE
S3455
ASG7013
POWER
R3453 1.5k
R3454 1.8k
R3455 2.4k
C3451 0.01
C3452 0.01
R3452 10k
R3451 10k
S3451
ROTARY ENCODER
ASX7038

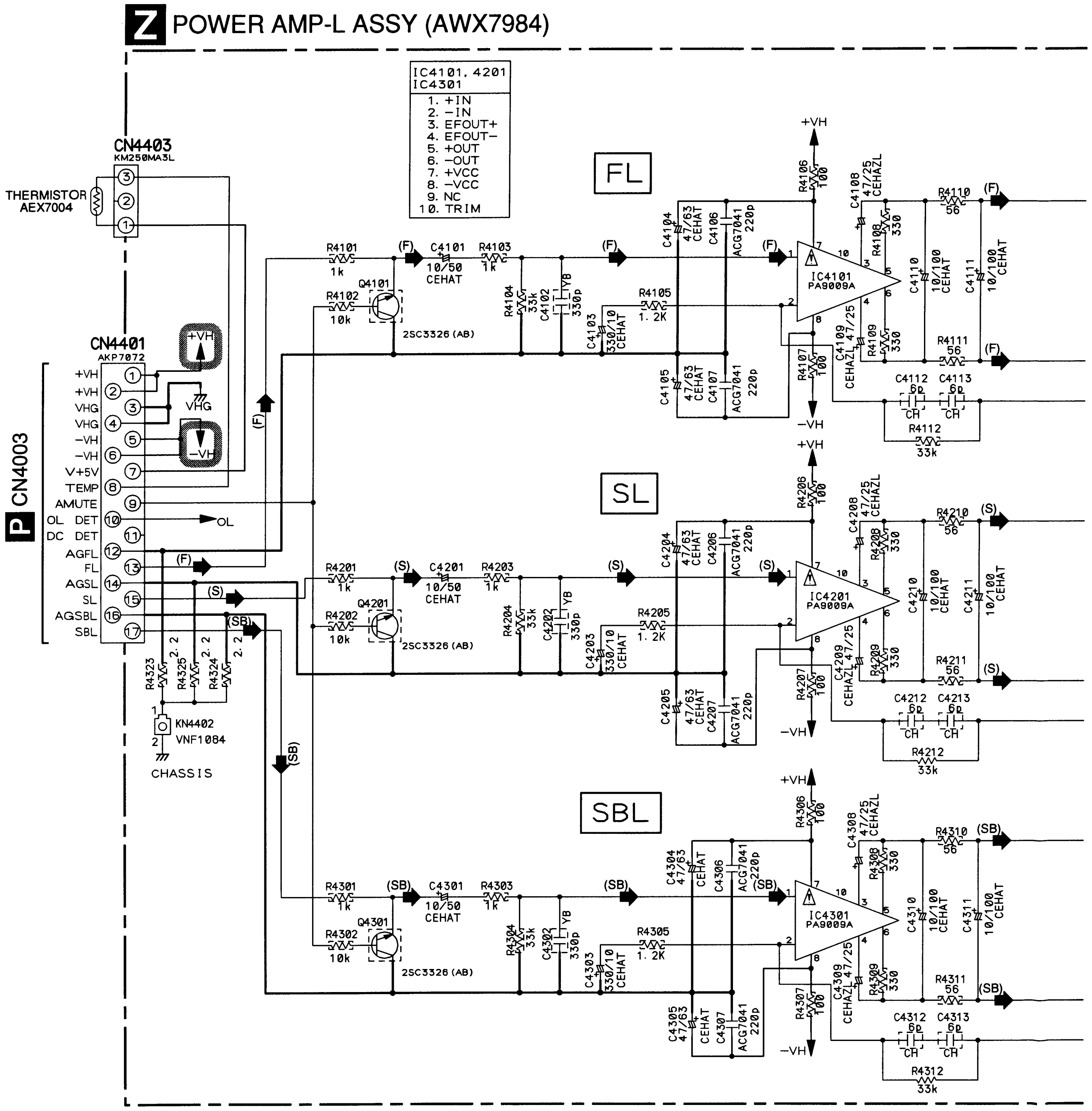
S3451 : MULTI JOG
S3452 : ENTER
S3453 : MUSIC
S3454 : MOVIE
S3455 : ⏻STANDBY/ON

Y HEADPHONE ASSY (AWX7980)


CN1951
52045-0345
HPSW
HPL
HPR
U CN3007
R1951
1k
(HP)
JA1951
AKN7029
PHONES
(HP)
C1951 3900p
C1952 3900p
KN1951
VNF1084

(HP)➡ : AUDIO SIGNAL ROUTE (PHONES ch)

3.19 POWER AMP-L ASSY

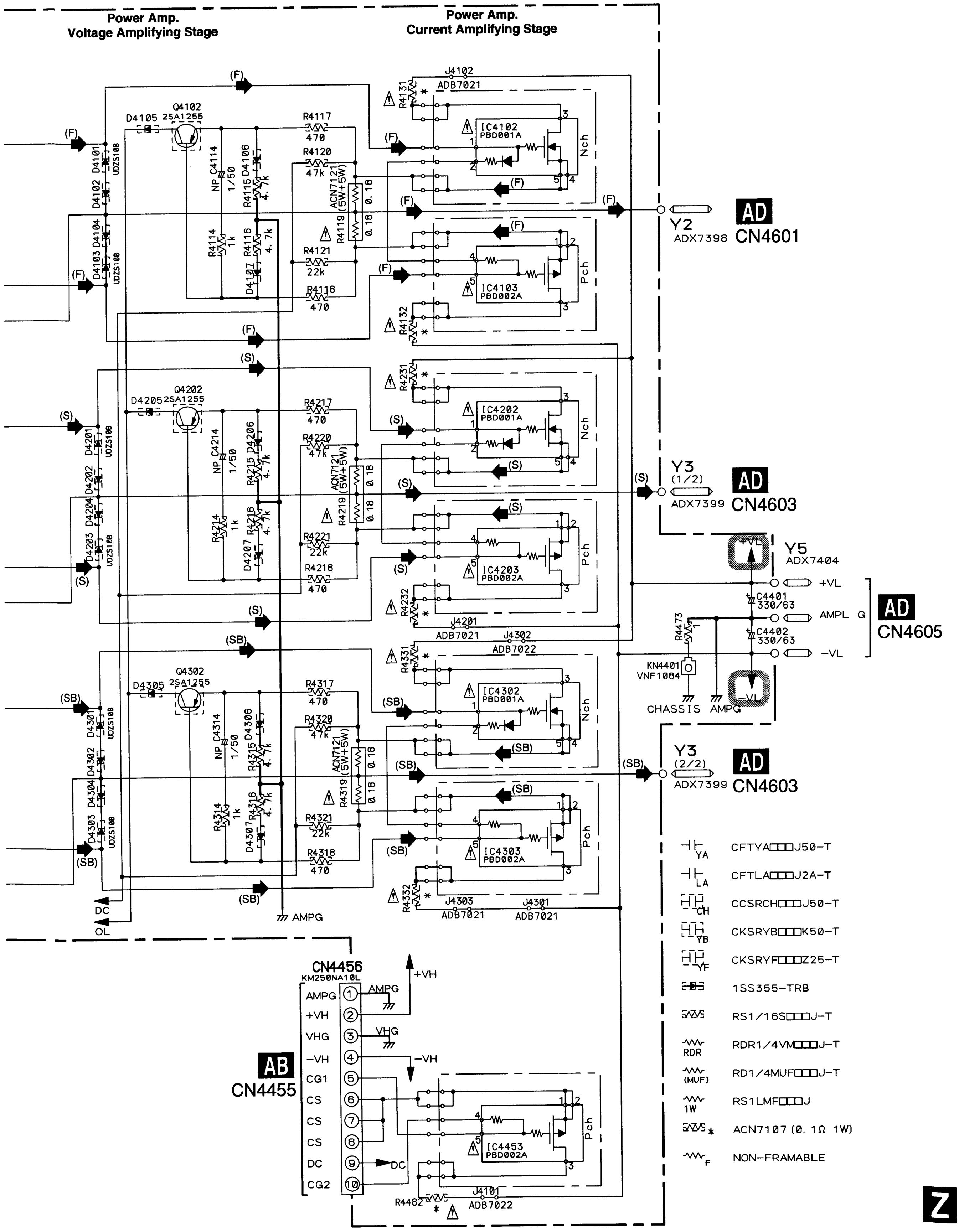

Z POWER AMP-L ASSY (AWX7984)
IC4101, 4201
IC4301
1. +IN
2. −IN
3. EFOUT+
4. EFOUT−
5. +OUT
6. −OUT
7. +VCC
8. −VCC
9. NC
10. TRIM
FL
SL
SBL
CN4403
KM250MA3L
THERMISTOR
AEX7004
CN4401
AKP7072
P CN4003
+VH
+VH
VHG
VHG
−VH
−VH
V+5V
TEMP
AMUTE
OL DET
DC DET
AGFL
FL
AGSL
SL
AGSBL
SBL
OL
KN4402
VNF1084
CHASSIS
R4323 2.2
R4325 2.2
R4324 2.2
R4101 1k
R4102 10k
Q4101
2SC3326 (AB)
C4101 10/50 CEHAT
R4103 1k
R4104 33k
C4102 330p YB
C4103 330/10 CEHAT
R4105 1.2K
C4104 47/63 CEHAT
C4106 ACG7041 220p
C4105 47/63 CEHAT
C4107 ACG7041 220p
R4106 100
R4107 100
C4108 47/25 CEHAZL
R4108 330
R4109 330
C4109 CEHAZL 47/25
IC4101
PA9009A
C4110 10/100 CEHAT
C4111 10/100 CEHAT
R4110 56
R4111 56
C4112 6p CH
C4113 6p CH
R4112 33k
R4201 1k
R4202 10k
Q4201
2SC3326 (AB)
C4201 10/50 CEHAT
R4203 1k
R4204 33k
C4202 330p YB
C4203 330/10 CEHAT
R4205 1.2K
C4204 47/63 CEHAT
C4206 ACG7041 220p
C4205 47/63 CEHAT
C4207 ACG7041 220p
R4206 100
R4207 100
C4208 47/25 CEHAZL
R4208 330
R4209 330
C4209 CEHAZL 47/25
IC4201
PA9009A
C4210 10/100 CEHAT
C4211 10/100 CEHAT
R4210 56
R4211 56
C4212 6p CH
C4213 6p CH
R4212 33k
R4301 1k
R4302 10k
Q4301
2SC3326 (AB)
C4301 10/50 CEHAT
R4303 1k
R4304 33k
C4302 330p YB
C4303 330/10 CEHAT
R4305 1.2K
C4304 47/63 CEHAT
C4306 ACG7041 220p
C4305 47/63 CEHAT
C4307 ACG7041 220p
R4306 100
R4307 100
C4308 47/25 CEHAZL
R4308 330
R4309 330
C4309 CEHAZL 47/25
IC4301
PA9009A
C4310 10/100 CEHAT
C4311 10/100 CEHAT
R4310 56
R4311 56
C4312 6p CH
C4313 6p CH
R4312 33k
+VH
−VH
(F)
(S)
(SB)

(F) : AUDIO SIGNAL ROUTE (FRONT Lch)

(S) : AUDIO SIGNAL ROUTE (SURROUND Lch)

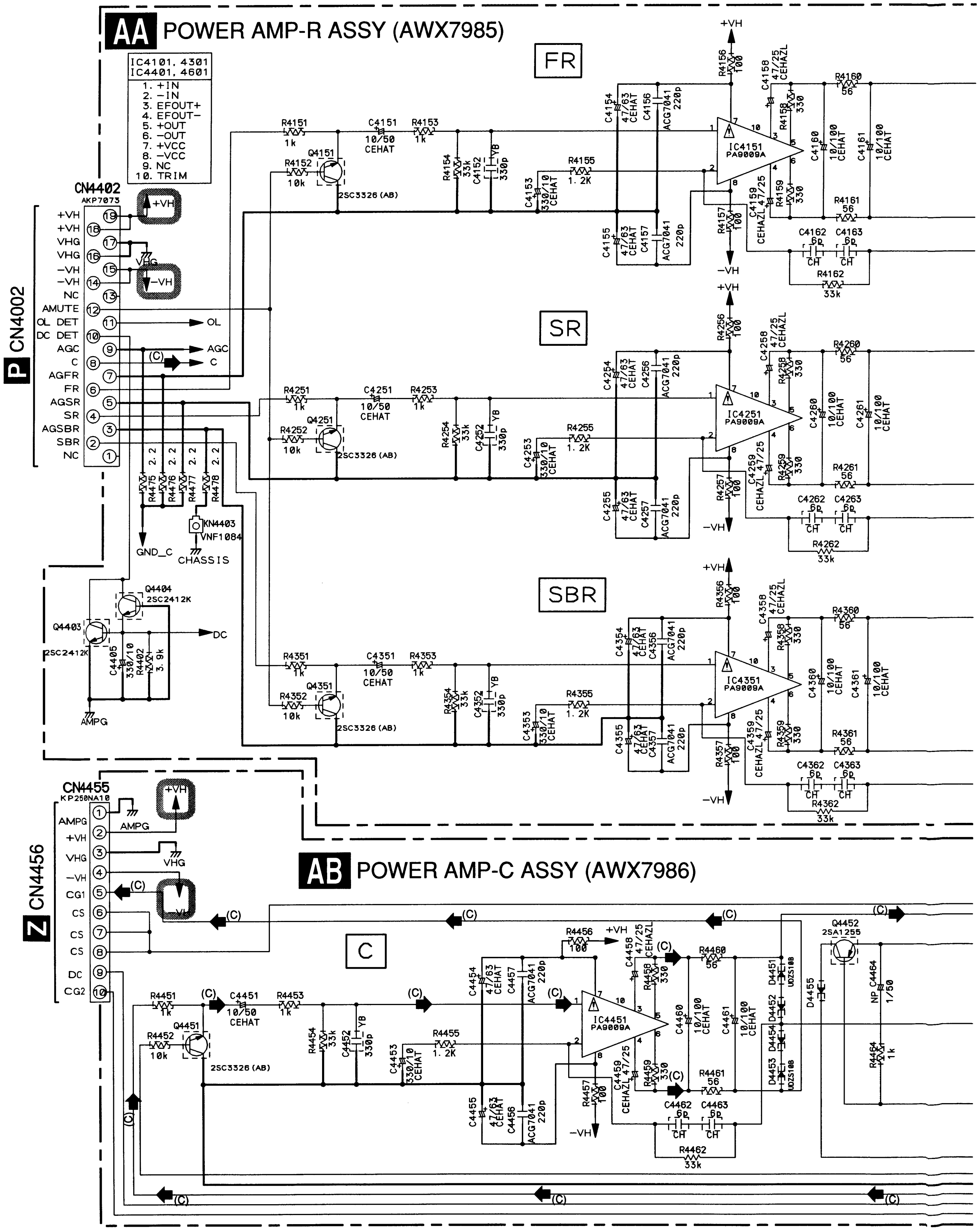
(SB) : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)

: The power supply is shown with the marked box.

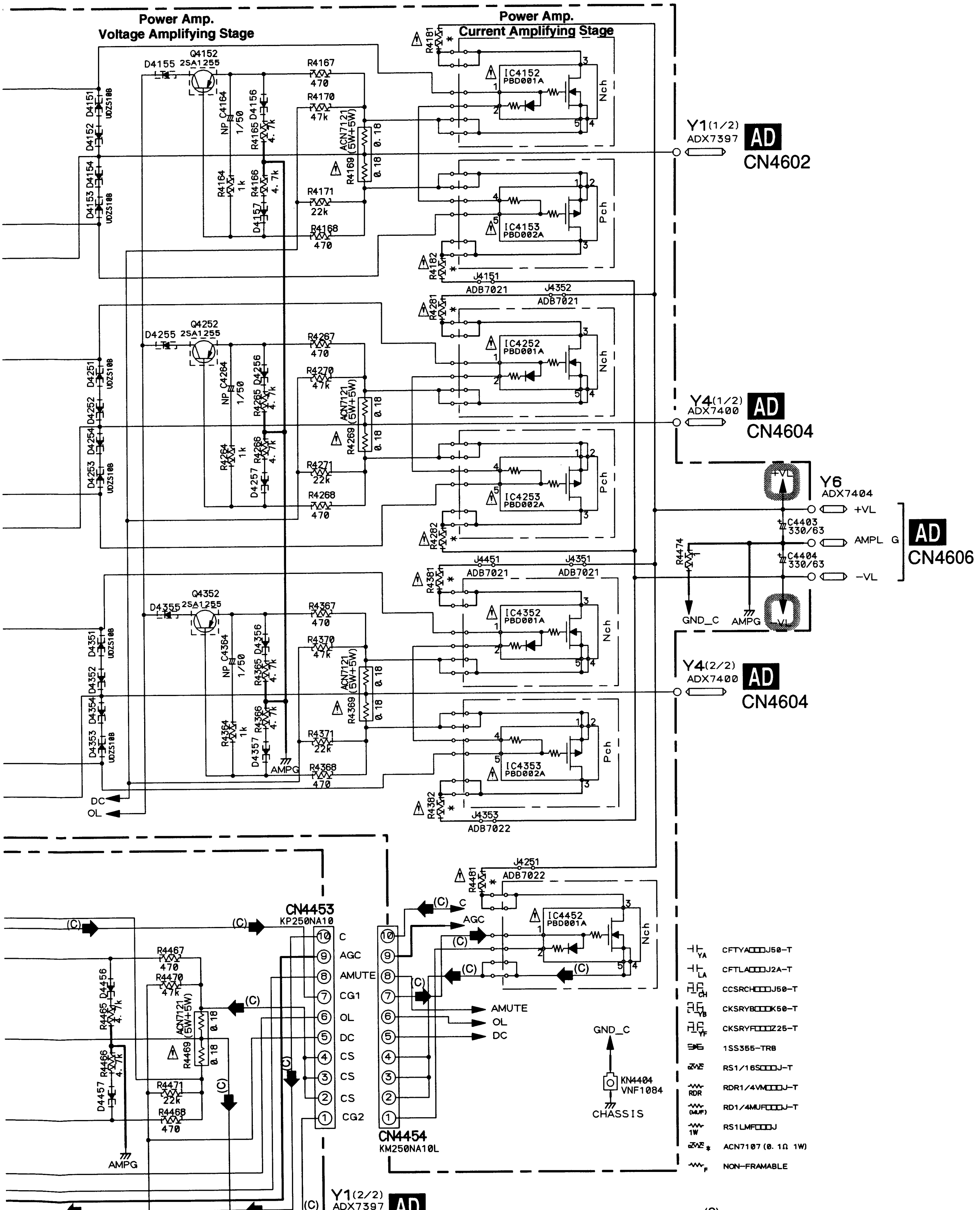

Power Amp.
Voltage Amplifying Stage
Power Amp.
Current Amplifying Stage
Q4102 2SA1255
D4105
D4101
D4102
D4103
D4104
UDZS10B
NP C4114 1/50
D4106
R4115 4.7k
R4114 1k
R4116 4.7k
D4107
R4117 470
R4120 47k
R4121 22k
R4118 470
ACN7121 (5W+5W)
R4119
0.18
R4131
R4132
J4102 ADB7021
IC4102 PBD001A
IC4103 PBD002A
Nch
Pch
(F)
Y2
ADX7398
AD
CN4601
Q4202 2SA1255
D4205
D4201
D4202
D4203
D4204
NP C4214 1/50
D4206
R4215 4.7k
R4214 1k
R4216 4.7k
D4207
R4217 470
R4220 47k
R4221 22k
R4218 470
R4219
R4231
R4232
IC4202 PBD001A
IC4203 PBD002A
J4201 ADB7021
J4302 ADB7022
(S)
Y3 (1/2)
ADX7399
AD
CN4603
Y5
ADX7404
+VL
C4401 330/63
AMPL G
C4402 330/63
-VL
R4473
KN4401 VNF1084
CHASSIS
AMPG
AD
CN4605
Q4302 2SA1255
D4305
D4301
D4302
D4303
D4304
NP C4314 1/50
D4306
R4315 4.7k
R4314 1k
R4316 4.7k
D4307
R4317 470
R4320 47k
R4321 22k
R4318 470
R4319
R4331
R4332
IC4302 PBD001A
IC4303 PBD002A
J4303 ADB7021
J4301 ADB7021
(SB)
Y3 (2/2)
ADX7399
AD
CN4603
DC
OL
AMPG
CN4456
KM250NA10L
AMPG ①
+VH ②
VHG ③
-VH ④
CG1 ⑤
CS ⑥
CS ⑦
CS ⑧
DC ⑨
CG2 ⑩
+VH
VHG
-VH
DC
AB
CN4455
IC4453 PBD002A
R4482
J4101 ADB7022
YA CFTYA□□□J50-T
LA CFTLA□□□J2A-T
CH CCSRCH□□□J50-T
YB CKSRYB□□□K50-T
YF CKSRYF□□□Z25-T
1SS355-TRB
RS1/16S□□□J-T
RDR RDR1/4VM□□□J-T
(MUF) RD1/4MUF□□□J-T
1W RS1LMF□□□J
* ACN7107 (0.1Ω 1W)
F NON-FRAMABLE

Z

3.20 POWER AMP-R and POWER AMP-C ASSYS


AA POWER AMP-R ASSY (AWX7985)
IC4101, 4301
IC4401, 4601
1. +IN
2. −IN
3. EFOUT+
4. EFOUT−
5. +OUT
6. −OUT
7. +VCC
8. −VCC
9. NC
10. TRIM
CN4402
AKP7073
P CN4002
+VH
+VH
VHG
VHG
−VH
−VH
NC
AMUTE
OL DET
DC DET
AGC
C
AGFR
FR
AGSR
SR
AGSBR
SBR
NC
OL
AGC
C
(C)
FR
SR
SBR
+VH
−VH
R4151 1k
C4151 10/50 CEHAT
R4153 1k
R4152 10k
Q4151
2SC3326 (AB)
R4154 33k
C4152 330p YB
C4153 330/10 CEHAT
R4155 1.2K
C4154 47/63 CEHAT
C4156 ACG7041 220p
C4155 47/63 CEHAT
C4157 ACG7041 220p
R4156 100
C4158 47/25 CEHAZL
R4158 330
IC4151 PA9009A
R4157 100
C4159 CEHAZL 47/25
R4159 330
C4160 10/100 CEHAT
C4161 10/100 CEHAT
R4160 56
R4161 56
C4162 6p CH
C4163 6p CH
R4162 33k
R4251 1k
C4251 10/50 CEHAT
R4253 1k
R4252 10k
Q4251
2SC3326 (AB)
R4254 33k
C4252 330p YB
C4253 330/10 CEHAT
R4255 1.2K
C4254 47/63 CEHAT
C4256 ACG7041 220p
C4255 47/63 CEHAT
C4257 ACG7041 220p
R4256 100
C4258 47/25 CEHAZL
R4258 330
IC4251 PA9009A
R4257 100
C4259 CEHAZL 47/25
R4259 330
C4260 10/100 CEHAT
C4261 10/100 CEHAT
R4260 56
R4261 56
C4262 6p CH
C4263 6p CH
R4262 33k
R4475 2.2
R4476 2.2
R4477 2.2
R4478 2.2
KN4403 VNF1084
GND_C
CHASSIS
Q4404 2SC2412K
Q4403 2SC2412K
C4405 330/10
R4402 3.9k
DC
AMPG
R4351 1k
C4351 10/50 CEHAT
R4353 1k
R4352 10k
Q4351
2SC3326 (AB)
R4354 33k
C4352 330p YB
C4353 330/10 CEHAT
R4355 1.2K
C4354 47/63 CEHAT
C4356 ACG7041 220p
C4355 47/63 CEHAT
C4357 ACG7041 220p
R4356 100
C4358 47/25 CEHAZL
R4358 330
IC4351 PA9009A
R4357 100
C4359 CEHAZL 47/25
R4359 330
C4360 10/100 CEHAT
C4361 10/100 CEHAT
R4360 56
R4361 56
C4362 6p CH
C4363 6p CH
R4362 33k
CN4455
KP250NA10
Z CN4456
AMPG
+VH
VHG
−VH
CG1
CS
CS
CS
DC
CG2
AMPG
VHG
+VH
−VH
(C)
AB POWER AMP-C ASSY (AWX7986)
C
R4451 1k
C4451 10/50 CEHAT
R4453 1k
R4452 10k
Q4451
2SC3326 (AB)
R4454 33k
C4452 330p YB
C4453 330/10 CEHAT
R4455 1.2K
C4454 47/63 CEHAT
C4457 ACG7041 220p
C4455 47/63 CEHAT
C4456 ACG7041 220p
R4456 100
+VH
C4458 47/25 CEHAZL
R4458 330
IC4451 PA9009A
R4457 100
−VH
C4459 CEHAZL 47/25
R4459 330
C4460 10/100 CEHAT
C4461 10/100 CEHAT
R4460 56
R4461 56
C4462 6p CH
C4463 6p CH
R4462 33k
D4451 UDZS10B
D4452
D4454
D4453 UDZS10B
D4455
Q4452 2SA1255
C4464 NP 1/50
R4464 1k

AA AB


Power Amp.
Voltage Amplifying Stage
Power Amp.
Current Amplifying Stage
Q4152 2SA1255
D4155
R4167 470
R4170 47k
NP C4164 1/50
D4156
R4165 4.7k
ACN7121 (5W+5W)
R4169 0.18 0.18
R4164 1k
R4166 4.7k
D4157
R4171 22k
R4168 470
D4151 D4152 D4153 D4154 UDZ10B
IC4152 PBD001A Nch
IC4153 PBD002A Pch
R4181 R4182
J4151 ADB7021
J4352 ADB7021
Y1(1/2) ADX7397 AD CN4602
Q4252 2SA1255
D4255
R4267 470
R4270 47k
NP C4264 1/50
D4256 R4265 4.7k
R4269 0.18 0.18
R4264 1k
R4266 4.7k
D4257
R4271 22k
R4268 470
D4251 D4252 D4253 D4254 UDZ10B
IC4252 PBD001A Nch
IC4253 PBD002A Pch
R4281 R4282
Y4(1/2) ADX7400 AD CN4604
Y6 ADX7404
+VL
C4403 330/63
AMPL G
C4404 330/63
-VL
AD CN4606
R4474
GND_C AMPG
+VL -VL
J4451 ADB7021
J4351 ADB7021
Q4352 2SA1255
D4355
R4367 470
R4370 47k
NP C4364 1/50
D4356 R4365 4.7k
R4369 0.18 0.18
R4364 1k
R4366 4.7k
D4357 AMPG
R4371 22k
R4368 470
D4351 D4352 D4353 D4354 UDZ10B
IC4352 PBD001A Nch
IC4353 PBD002A Pch
R4381 R4382
J4353 ADB7022
Y4(2/2) ADX7400 AD CN4604
DC OL
J4251 ADB7022
R4481
IC4452 PBD001A Nch
CN4453 KP250NA10
10 C
9 AGC
8 AMUTE
7 CG1
6 OL
5 DC
4 CS
3 CS
2 CS
1 CG2
CN4454 KM250NA10L
C AGC AMUTE OL DC
(C)
R4467 470
R4470 47k
R4469 0.18 0.18
R4471 22k
R4468 470
D4456 R4465 4.7k
R4466 4.7k D4457
AMPG
GND_C
KN4404 VNF1084
CHASSIS
YA CFTYA□□□J50-T
LA CFTLA□□□J2A-T
CH CCSRCH□□□J50-T
YB CKSRYB□□□K50-T
YF CKSRYF□□□Z25-T
1SS355-TRB
RS1/16S□□□J-T
RDR RDR1/4VM□□□J-T
(MUF) RD1/4MUF□□□J-T
1W RS1LMF□□□J
* ACN7107 (0.1Ω 1W)
F NON-FRAMABLE

Y1(2/2) ADX7397 **AD** CN4602

(C) : AUDIO SIGNAL ROUTE (CENTER ch)

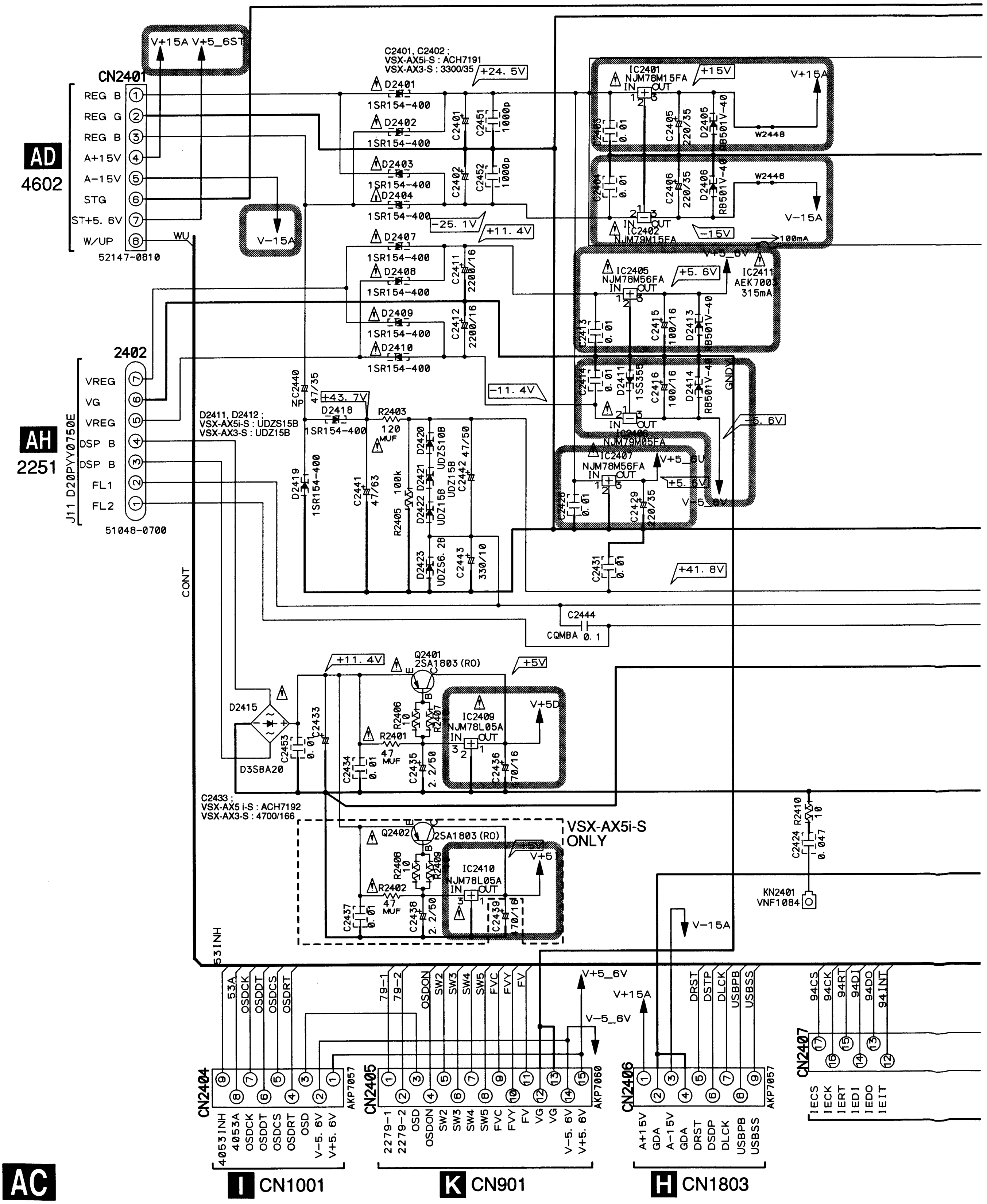
: The power supply is shown with the marked box.

AA **AB**

3.21 REGULATOR ASSY

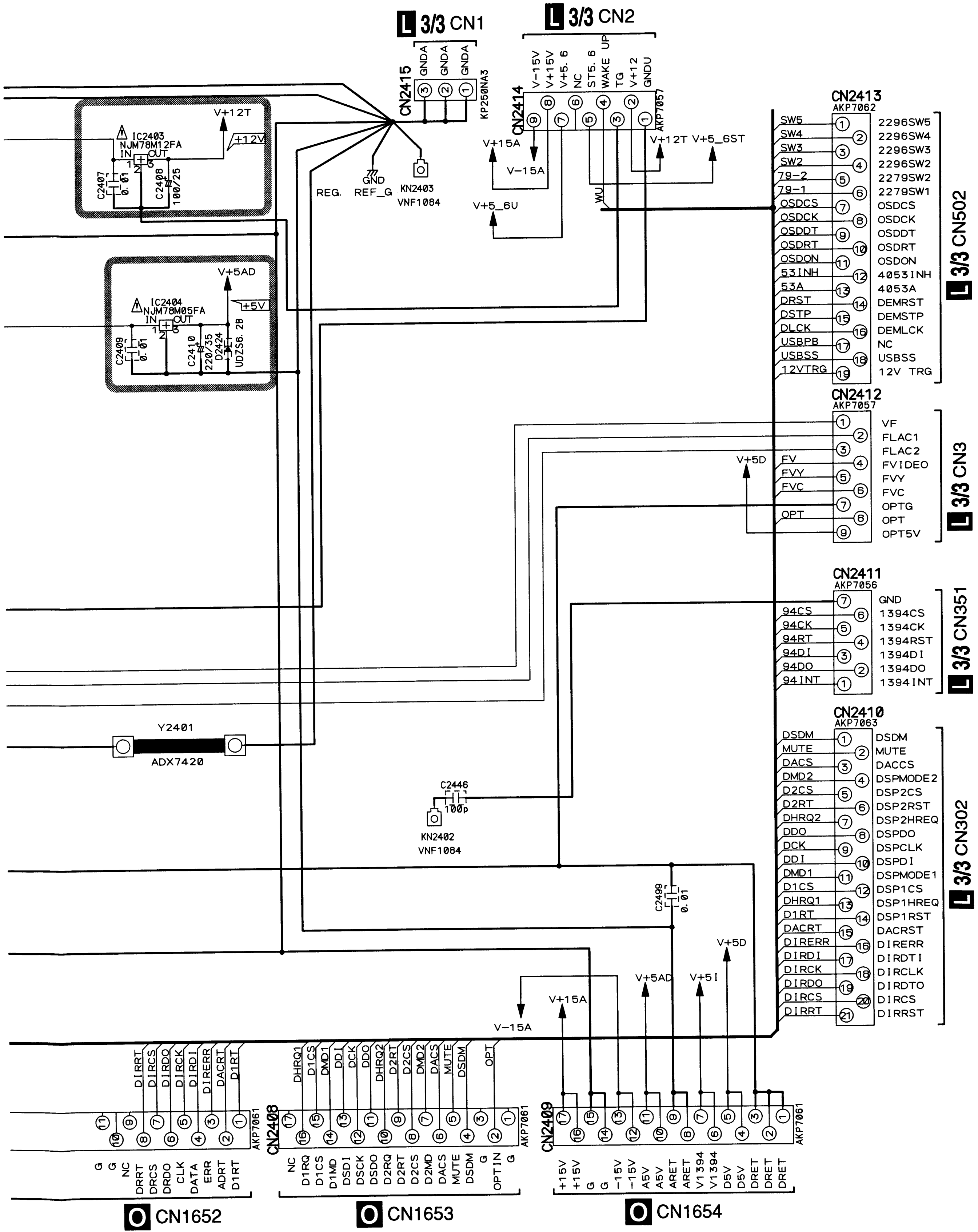
AC REGULATOR ASSY
(VSX-AX5i-S : AWX8305)
(VSX-AX3-S, -K : AWX8020)

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.315 MFD, BY LITTELFUSE INK. FOR IC4701 AND IC2411.



V+15A V+5_6ST
CN2401
REG B ①
REG G ②
REG B ③
A+15V ④
A-15V ⑤
STG ⑥
ST+5. 6V ⑦
W/UP ⑧
52147-0810
AD 4602
WU
V-15A
C2401, C2402 :
VSX-AX5i-S : ACH7191
VSX-AX3-S : 3300/35
+24. 5V
D2401 1SR154-400
D2402 1SR154-400
D2403 1SR154-400
D2404 1SR154-400
C2401 C2451 1000p
C2402 C2452 1000p
-25. 1V
+11. 4V
D2407 1SR154-400
D2408 1SR154-400
D2409 1SR154-400
D2410 1SR154-400
C2411 2200/16
C2412 2200/16
IC2401 NJM78M15FA
+15V
V+15A
C2403 0. 01
C2405 220/35
D2405 RB501V-40
W2448
C2404 0. 01
C2406 220/35
D2406 RB501V-40
W2446
IC2402 NJM79M15FA
-15V
V-15A
100mA
V+5_6V
IC2405 NJM78M56FA
+5. 6V
IC2411 AEK7003 315mA
C2413 0. 01
C2415 100/16
D2413 RB501V-40
C2414 0. 01
D2411 1SS355
C2416 100/16
D2414 RB501V-40
GND
-11. 4V
IC2406 NJM79M05FA
-5. 6V
IC2407 NJM78M56FA
V+5_6U
+5. 6V
V-5_6V
C2426 0. 01
C2429 220/35
C2431 0. 01
+41. 8V
2402
VREG ⑦
VG ⑥
VREG ⑤
DSP B ④
DSP B ③
FL1 ②
FL2 ①
J11 D20PYY0750E
AH 2251
51048-0700
C2440 NP 47/35
+43. 7V
D2418 1SR154-400
R2403 120 MUF
D2411, D2412 :
VSX-AX5i-S : UDZS15B
VSX-AX3-S : UDZ15B
D2420 UDZS10B
D2421 UDZ15B
D2422 UDZ15B
C2442 47/50
D2419 1SR154-400
C2441 47/63
R2405 100k
D2423 UDZS6. 2B
C2443 330/10
CONT
C2444 CQMBA 0. 1
+11. 4V
Q2401 2SA1803 (RO)
+5V
D2415 D3SBA20
R2406 10
R2407 10
IC2409 NJM78L05A
V+5D
R2401 47 MUF
C2453 0. 01
C2433
C2434 0. 01
C2435 2. 2/50
C2436 470/16
C2433 :
VSX-AX5 i-S : ACH7192
VSX-AX3-S : 4700/166
Q2402 2SA1803 (RO)
VSX-AX5i-S ONLY
R2408 10
R2409 10
IC2410 NJM78L05A
+5V
V+5
R2402 47 MUF
C2437 0. 01
C2438 2. 2/50
C2439 470/16
R2410 10
C2424 0. 047
KN2401 VNF1084
V-15A
53INH
53A OSDCK OSDDT OSDCS OSDRT
79-1 79-2 OSDON SW2 SW3 SW4 SW5 FVC FVY FV
V+5_6V
V+15A
V-5_6V
DRST DSTP DLCK USBPB USBSS
94CS 94CK 94RT 94DI 94DO 94INT
CN2404 AKP7057
4053INH 4053A OSDCK OSDDT OSDCS OSDRT OSD V-5. 6V V+5. 6V
CN2405 AKP7060
2279-1 2279-2 OSD OSDON SW2 SW3 SW4 SW5 FVC FVY FV VG VG V-5. 6V V+5. 6V
CN2406 AKP7057
A+15V GDA A-15V GDA DRST DSDP DLCK USBPB USBSS
CN2407
IECS IECK IERT IEDI IEDO IEIT
I CN1001
K CN901
H CN1803

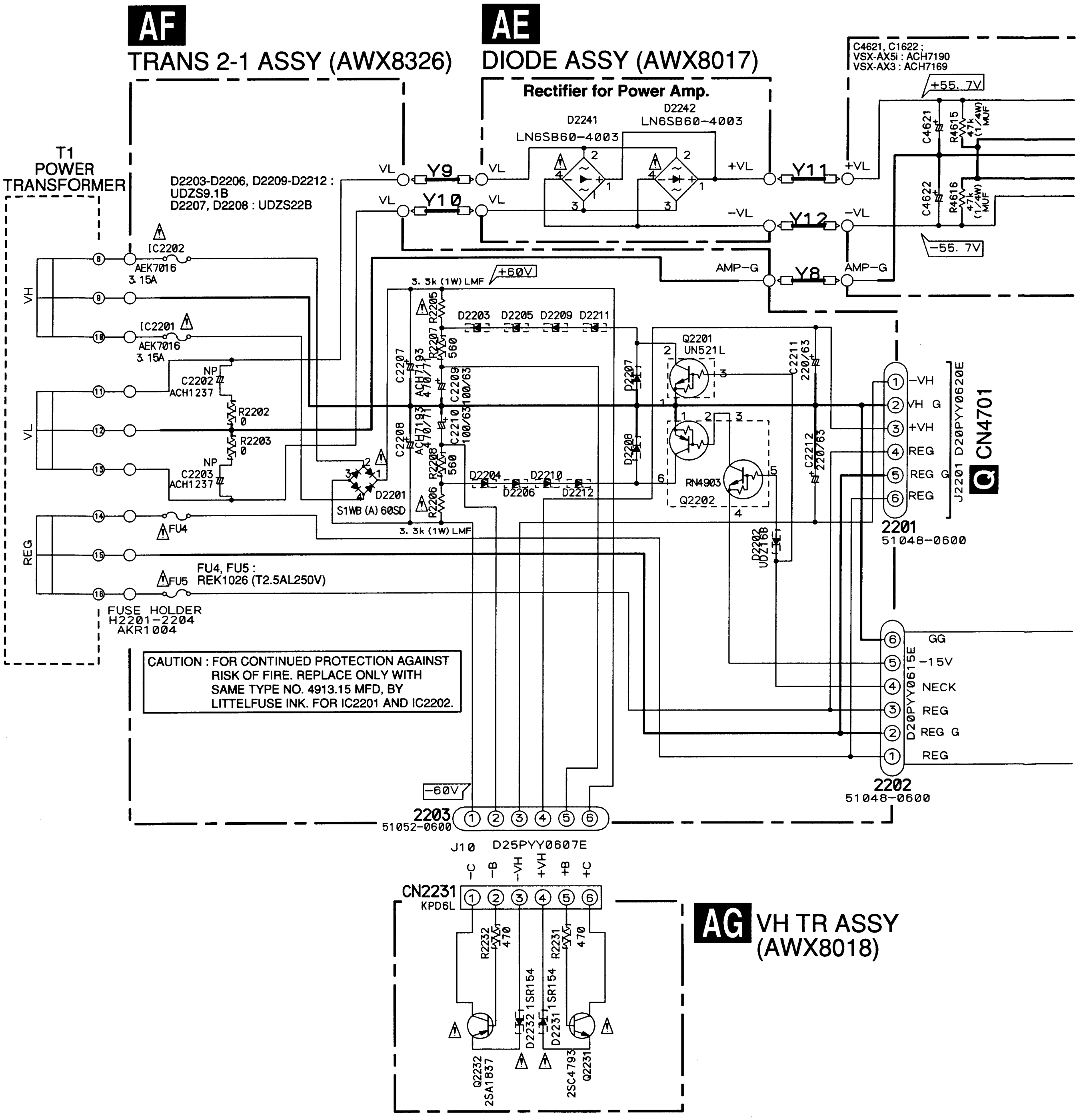
AC


L 3/3 CN1
L 3/3 CN2
CN2415
GNDA
GNDA
GNDA
KP250NA3
CN2414
V-15V
V+15V
V+5.6
NC
ST5.6
WAKE UP
TG
V+12
GNDU
AKP7057
IC2403
NJM78M12FA
IN OUT
V+12T
+12V
C2407
0.01
C2408
100/25
REG.
GND
REF_G
KN2403
VNF1084
V+15A
V-15A
V+5_6U
V+12T
V+5_6ST
WU
IC2404
NJM78M05FA
V+5AD
+5V
C2409
0.01
C2410
220/35
D2424
UDZS6.2B
CN2413
AKP7062
SW5
SW4
SW3
SW2
79-2
79-1
OSDCS
OSDCK
OSDDT
OSDRT
OSDON
53INH
53A
DRST
DSTP
DLCK
USBPB
USBSS
12VTRG
2296SW5
2296SW4
2296SW3
2296SW2
2279SW2
2279SW1
OSDCS
OSDCK
OSDDT
OSDRT
OSDON
4053INH
4053A
DEMRST
DEMSTP
DEMLCK
NC
USBSS
12V TRG
L 3/3 CN502
CN2412
AKP7057
VF
FLAC1
FLAC2
FVIDEO
FVY
FVC
OPTG
OPT
OPT5V
V+5D
FV
FVY
FVC
OPT
L 3/3 CN3
CN2411
AKP7056
94CS
94CK
94RT
94DI
94DO
94INT
GND
1394CS
1394CK
1394RST
1394DI
1394DO
1394INT
L 3/3 CN351
Y2401
ADX7420
CN2410
AKP7063
DSDM
MUTE
DACS
DMD2
D2CS
D2RT
DHRQ2
DDO
DCK
DDI
DMD1
D1CS
DHRQ1
D1RT
DACRT
DIRERR
DIRDI
DIRCK
DIRDO
DIRCS
DIRRT
DSDM
MUTE
DACCS
DSPMODE2
DSP2CS
DSP2RST
DSP2HREQ
DSPDO
DSPCLK
DSPDI
DSPMODE1
DSP1CS
DSP1HREQ
DSP1RST
DACRST
DIRERR
DIRDTI
DIRCLK
DIRDTO
DIRCS
DIRRST
L 3/3 CN302
C2446
100p
KN2402
VNF1084
C2499
0.01
V+5D
V+5AD
V+5I
V+15A
V-15A
DIRRT
DIRCS
DIRDO
DIRCK
DIRDI
DIRERR
DACRT
D1RT
AKP7061
G
G
NC
DRRT
DRCS
DRDO
CLK
DATA
ERR
ADRT
D1RT
O CN1652
CN2408
DHRQ1
D1CS
DMD1
DDI
DCK
DDO
DHRQ2
D2RT
D2CS
DMD2
DACS
MUTE
DSDM
OPT
AKP7061
NC
D1RQ
D1CS
D1MD
DSDI
DSCK
DSDO
D2RQ
D2RT
D2CS
D2MD
DACS
MUTE
DSDM
G
OPTIN
G
O CN1653
CN2409
AKP7061
+15V
+15V
G
G
-15V
-15V
A5V
A5V
ARET
ARET
V1394
V1394
D5V
D5V
DRET
DRET
DRET
O CN1654

: The power supply is shown with the marked box.

AC

3.22 SP/PS, DIODE, TRANS 2-1 and VH TR ASSYS


AF
TRANS 2-1 ASSY (AWX8326)
AE
DIODE ASSY (AWX8017)
Rectifier for Power Amp.
D2241
D2242
LN6SB60-4003
LN6SB60-4003
C4621, C1622 :
VSX-AX5i : ACH7190
VSX-AX3 : ACH7169
+55. 7V
-55. 7V
C4621
C4622
R4615 47k (1/4W) MUF
R4616 47k (1/4W) MUF
T1
POWER
TRANSFORMER
D2203-D2206, D2209-D2212 :
UDZS9.1B
D2207, D2208 : UDZS22B
VL
Y9
Y10
+VL
-VL
Y11
Y12
AMP-G
Y8
IC2202
AEK7016
3.15A
IC2201
AEK7016
3.15A
VH
VL
REG
C2202 NP ACH1237
C2203 NP ACH1237
R2202 0
R2203 0
+60V
-60V
3.3k (1W) LMF
R2205
R2207 560
R2208 560
R2206
C2207 ACH7193
C2208 ACH7193
C2209 100/63
C2210 100/63
D2203 D2205 D2209 D2211
D2204 D2206 D2210 D2212
D2201
S1WB (A) 60SD
D2207
D2208
Q2201
UN521L
Q2202
RN4903
C2211 220/63
C2212 220/63
D2202 UDZ16B
FU4
FU5
FU4, FU5 :
REK1026 (T2.5AL250V)
FUSE HOLDER
H2201-2204
AKR1004
-VH
VH G
+VH
REG
REG G
REG
J2201 D20PYY0620E
CN4701
Q
2201
51048-0600
GG
-15V
NECK
REG
REG G
REG
D20PYY0615E
2202
51048-0600
2203
51052-0600
J10 D25PYY0607E
-C -B -VH +VH +B +C
CN2231
KPD6L
AG
VH TR ASSY
(AWX8018)
R2232 470
R2231 470
D2232 1SR154
D2231 1SR154
Q2232 2SA1837
Q2231 2SC4793

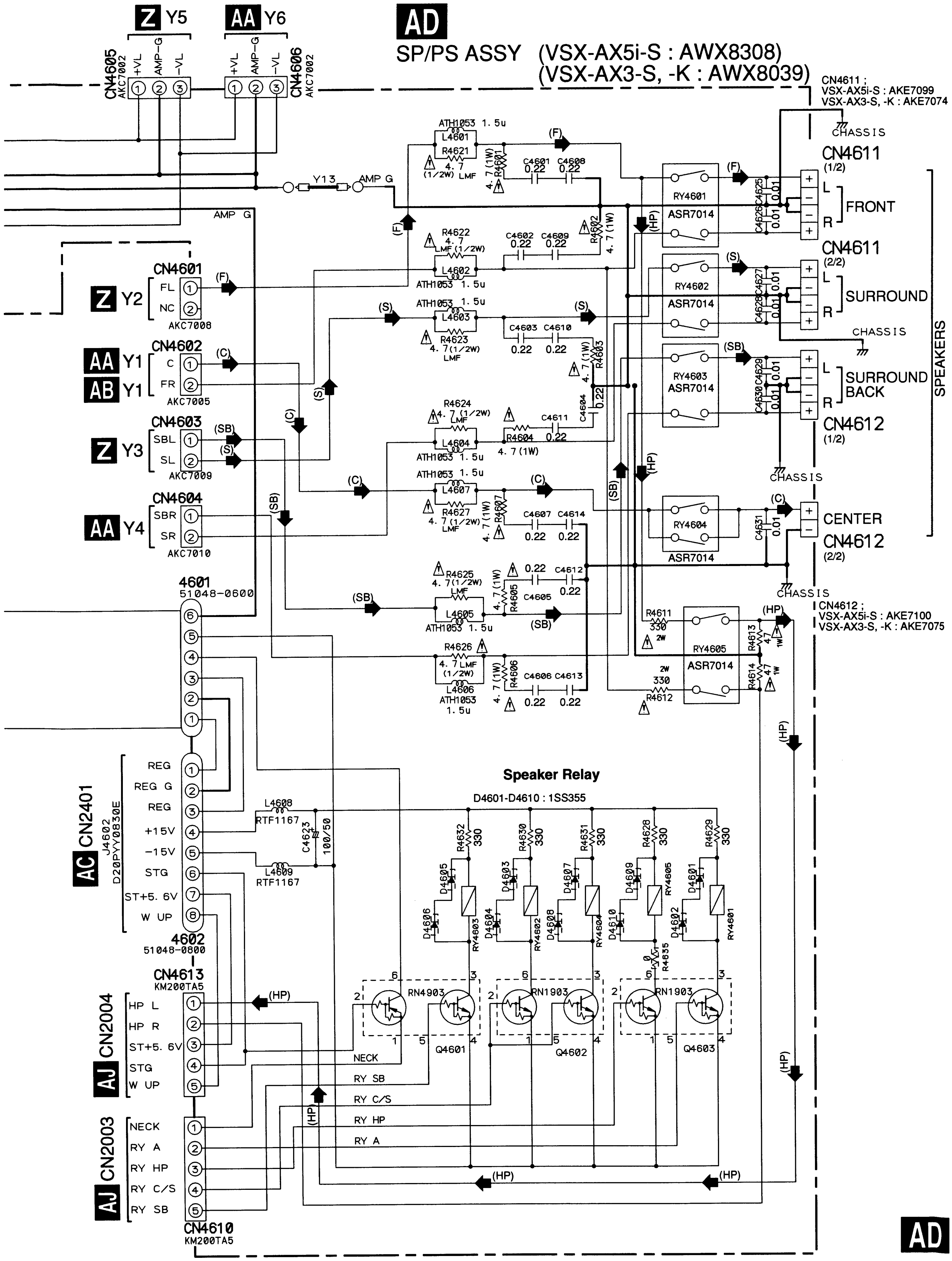
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 4913.15 MFD, BY LITTELFUSE INK. FOR IC2201 AND IC2202.

- NOTE FOR FUSE REPLACEMENT

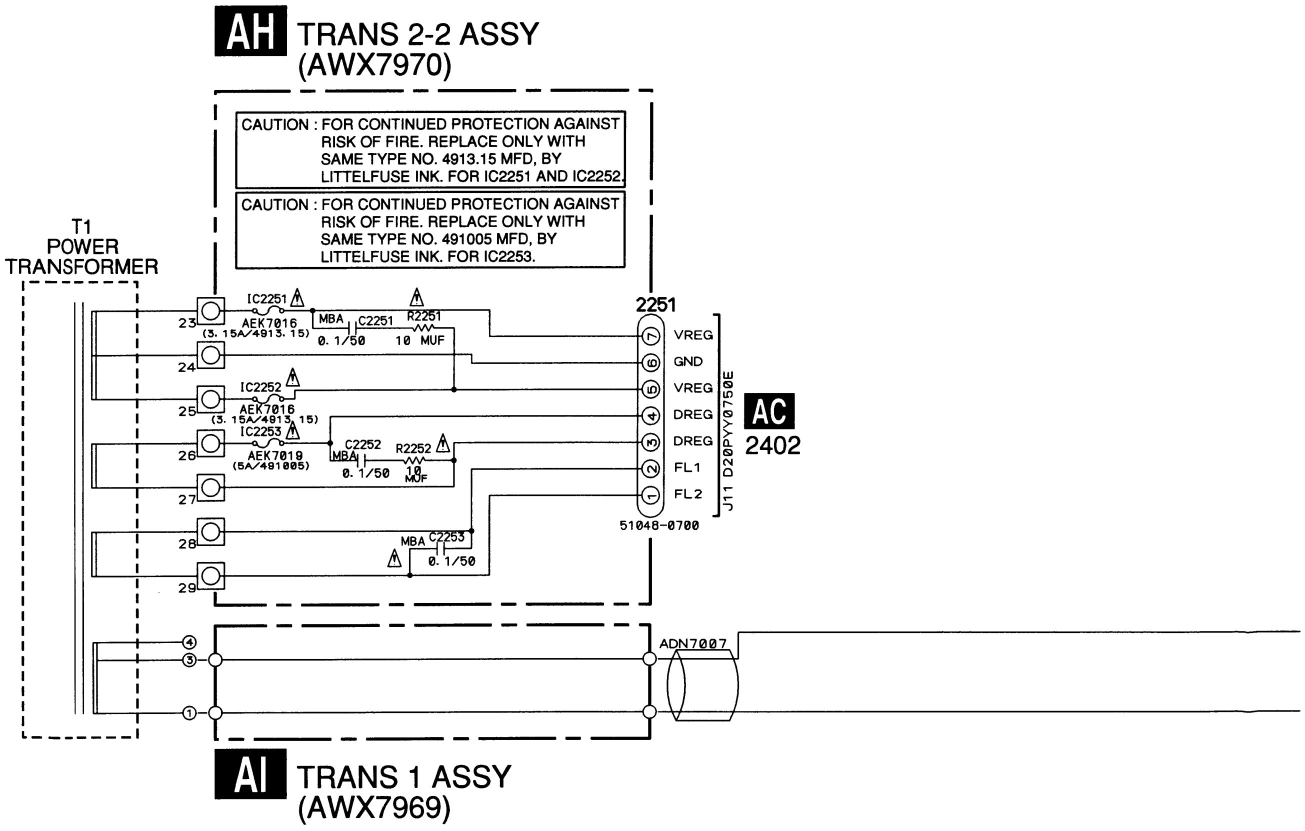
CAUTION -FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY.

(F) ➡ : AUDIO SIGNAL ROUTE (FRONT Lch)
(S) ➡ : AUDIO SIGNAL ROUTE (SURROUND Lch)
(SB) ➡ : AUDIO SIGNAL ROUTE (SURROUND BACK Lch)
(C) ➡ : AUDIO SIGNAL ROUTE (CENTER ch)
(HP) ➡ : AUDIO SIGNAL ROUTE (PHONES ch)

AD SP/PS ASSY (VSX-AX5i-S : AWX8308) (VSX-AX3-S, -K : AWX8039)


Z Y5
AA Y6
CN4605 AKC7002
+VL
AMP-G
-VL
CN4606 AKC7002
CN4611 ; VSX-AX5i-S : AKE7099 VSX-AX3-S, -K : AKE7074
CHASSIS
CN4611 (1/2)
FRONT
CN4611 (2/2)
SURROUND
SURROUND BACK
CN4612 (1/2)
CENTER
CN4612 (2/2)
SPEAKERS
CN4612 ; VSX-AX5i-S : AKE7100 VSX-AX3-S, -K : AKE7075
Y13
AMP G
ATH1053 1.5u
L4601
R4621 4.7 (1/2W) LMF
R4601 4.7 (1W)
C4601 0.22
C4608 0.22
RY4601 ASR7014
C4625 0.01
C4626 0.01
R4622 4.7 LMF (1/2W)
L4602
C4602 0.22
C4609 0.22
R4602 4.7 (1W)
RY4602 ASR7014
C4627 0.01
C4628 0.01
L4603
R4623 4.7 (1/2W) LMF
C4603 0.22
C4610 0.22
R4603 4.7 (1W)
RY4603 ASR7014
C4629 0.01
C4630 0.01
R4624 4.7 (1/2W) LMF
L4604
R4604 4.7 (1W)
C4611 0.22
C4604 0.22
L4607
R4627 4.7 (1/2W) LMF
R4607 4.7 (1W)
C4607 0.22
C4614 0.22
RY4604 ASR7014
C4631 0.01
R4625 4.7 (1/2W) LMF
R4605 4.7 (1W)
C4605
C4612 0.22
L4605
R4626 4.7 LMF (1/2W)
L4606
R4606 4.7 (1W)
C4606 0.22
C4613 0.22
R4611 330 2W
R4612 330 2W
RY4605 ASR7014
R4613 47 1W
R4614 47 1W
CN4601 FL NC AKC7008
Z Y2
CN4602 C FR AKC7005
AA Y1
AB Y1
CN4603 SBL SL AKC7009
Z Y3
CN4604 SBR SR AKC7010
AA Y4
(F)
(S)
(C)
(SB)
(HP)
4601 51048-0600
AC CN2401 J4602 D20PYY0830E
REG
REG G
REG
+15V
-15V
STG
ST+5.6V
W UP
4602 51048-0800
L4608 RTF1167
C4623 100/50
L4609 RTF1167
Speaker Relay
D4601-D4610 : 1SS355
R4632 330
R4630 330
R4631 330
R4628 330
R4629 330
D4605 D4606 RY4603
D4603 D4604 RY4602
D4607 D4608 RY4604
D4609 D4610 RY4605
R4635 0
D4601 D4602 RY4601
RN4903 Q4601
RN1903 Q4602
RN1903 Q4603
CN4613 KM200TA5
AJ CN2004
HP L
HP R
ST+5.6V
STG
W UP
NECK
RY SB
RY C/S
RY HP
RY A
AJ CN2003
NECK
RY A
RY HP
RY C/S
RY SB
CN4610 KM200TA5
AD

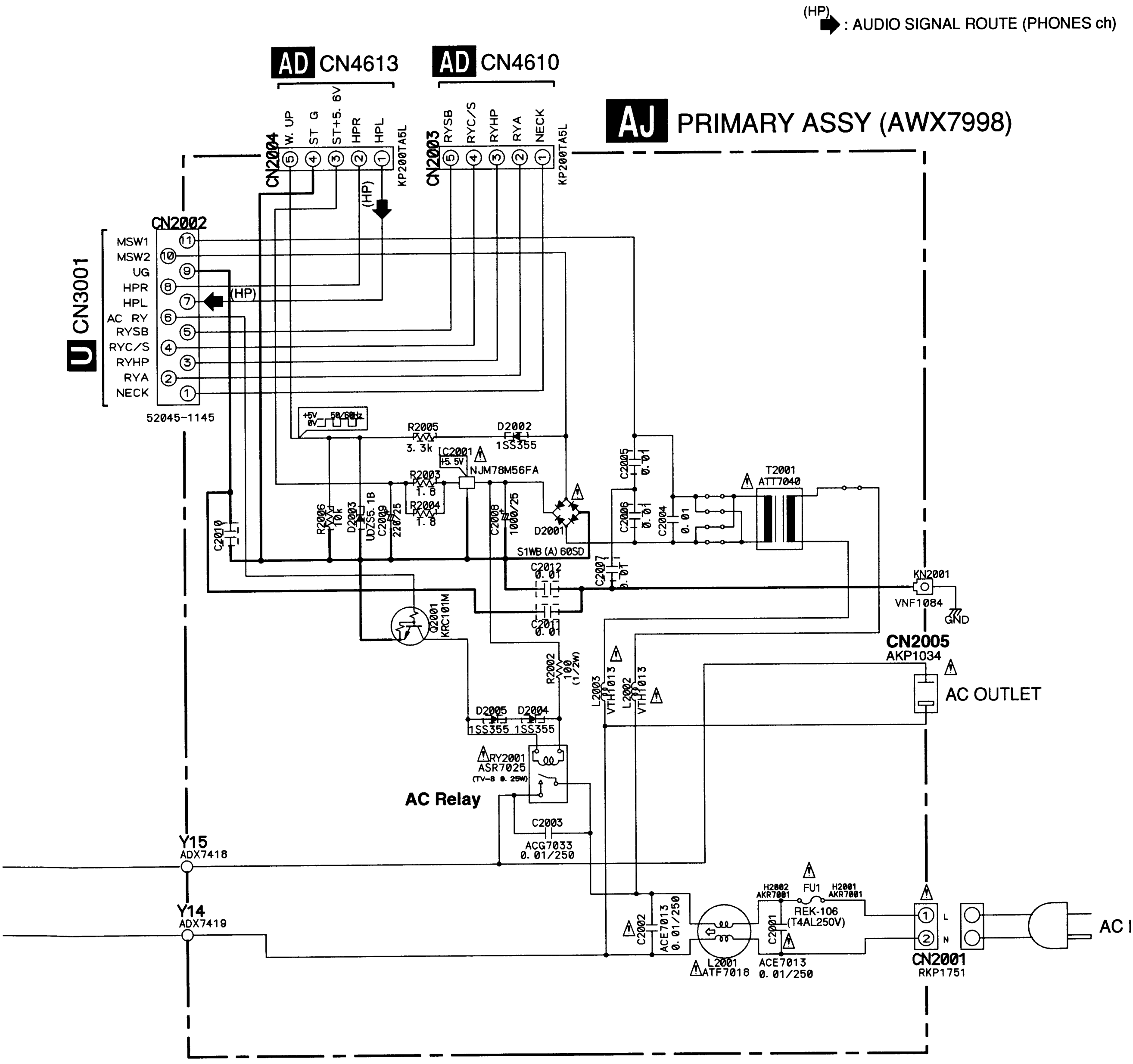
3.23 TRANS 2-2, TRANS 1 and PRIMARY ASSYS



CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 4913.15 MFD, BY LITTELFUSE INK. FOR IC2251 AND IC2252.

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491005 MFD, BY LITTELFUSE INK. FOR IC2253.

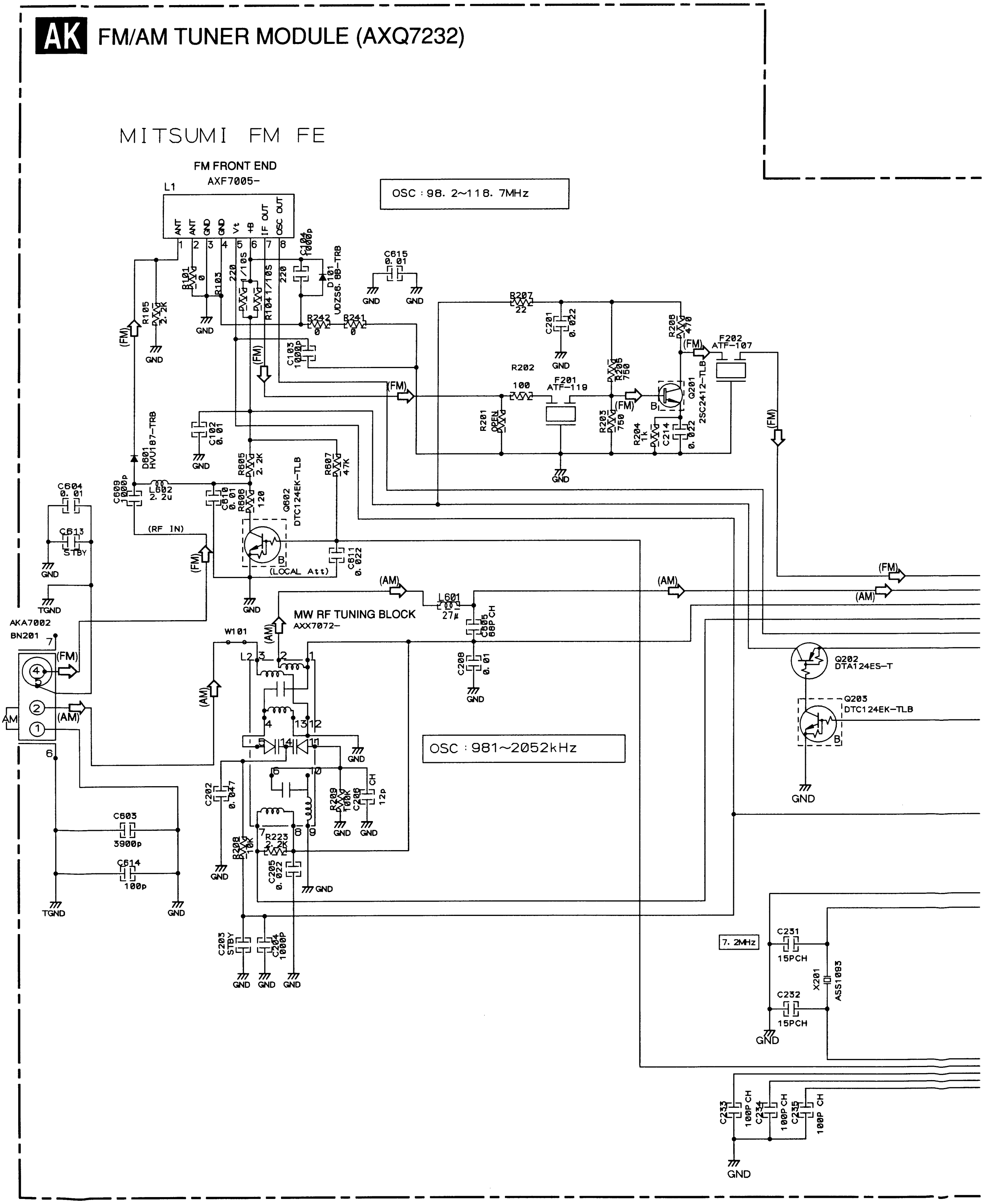
AH
TRANS 2-2 ASSY
(AWX7970)
T1
POWER
TRANSFORMER
23
24
25
26
27
28
29
IC2251
AEK7016
(3. 15A/4913. 15)
MBA
C2251
0. 1/50
R2251
10 MUF
IC2252
AEK7016
(3. 15A/4913. 15)
IC2253
AEK7019
(5A/491005)
C2252
MBA
0. 1/50
R2252
10
MUF
MBA
C2253
0. 1/50
2251
⑦ VREG
⑥ GND
⑤ VREG
④ DREG
③ DREG
② FL1
① FL2
J11 D20PYY0750E
51048-0700
AC
2402
④
③
①
ADN7007
AI
TRANS 1 ASSY
(AWX7969)


(HP) : AUDIO SIGNAL ROUTE (PHONES ch)
AD CN4613
AD CN4610
AJ PRIMARY ASSY (AWX7998)
CN2004
W. UP
ST G
ST+5. 6V
HPR
HPL
KP200TA5L
CN2003
RYSB
RYC/S
RYHP
RYA
NECK
KP200TA5L
(HP)
CN2002
U CN3001
MSW1
MSW2
UG
HPR
HPL
AC RY
RYSB
RYC/S
RYHP
RYA
NECK
(HP)
52045-1145
+5V 50/60Hz
0V
R2005
3. 3k
D2002
1SS355
IC2001
+5. 5V
NJM78M56FA
R2003
1. 8
R2004
1. 8
R2006
10k
D2003
UDZS5. 1B
C2009
220/25
C2008
1000/25
D2001
S1WB (A) 60SD
C2010
C2005
0. 01
C2006
0. 01
C2004
0. 01
C2007
0. 01
C2012
0. 01
C2011
0. 01
T2001
ATT7040
KN2001
VNF1084
GND
Q2001
KRC101M
R2002
100
(1/2W)
L2003
VTH1013
L2002
VTH1013
CN2005
AKP1034
AC OUTLET
D2005
1SS355
D2004
1SS355
RY2001
ASR7025
(TV-8 0. 25W)
AC Relay
C2003
ACG7033
0. 01/250
Y15
ADX7418
Y14
ADX7419
C2002
ACE7013
0. 01/250
L2001
ATF7018
C2001
ACE7013
0. 01/250
H2002
AKR7001
FU1
REK-106
(T4AL250V)
H2001
AKR7001
L
N
CN2001
RKP1751
AC IN

• NOTE FOR FUSE REPLACEMENT

CAUTION -FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY.

3.24 FM/AM TUNER MODULE


AK FM/AM TUNER MODULE (AXQ7232)

MITSUMI FM FE
FM FRONT END
AXF7005-
L1
ANT
ANT
GND
GND
Vt
+B
IF OUT
OSC OUT
1 2 3 4 5 6 7 8
OSC : 98. 2~118. 7MHz
C104 1000p
D101 UDZS6. 8B-TRB
R101 0
R103 220
R104 1/10S
R104 1/10S 220
R105 2.2K
C615 0.01
R242 0
R241 0
R207 22
C201 0.022
R206 470
F202 ATF-107
C103 1000p
R202 100
F201 ATF-119
R205 750
Q201 2SC2412-TLB
R201 OPEN
R203 750
R204 1k
C214 0.022
C102 0.01
D601 HVU187-TRB
R605 2.2K
R607 47K
Q602 DTC124EK-TLB
C604 0.01
C609 1000p
L602 2.2u
C610 0.01
R606 120
C611 0.022
C613 STBY
(RF IN)
(LOCAL Att)
(FM)
(AM)
GND
TGND
AKA7002
BN201
7
6
AM
MW RF TUNING BLOCK
AXX7072-
W101
L601 27µ
C505 68PCH
C208 0.01
Q202 DTA124ES-T
Q203 DTC124EK-TLB
B
OSC : 981~2052kHz
C202 0.047
R209 100K
C206 12p
CH
R223 2.2K
R208 10K
C205 0.022
C603 3900p
C614 100p
C203 STBY
C204 1000P
7. 2MHz
C231 15PCH
C232 15PCH
X201 ASS1093
C233 100PCH
C234 100PCH
C235 100P CH

: The power supply is shown with the marked box.

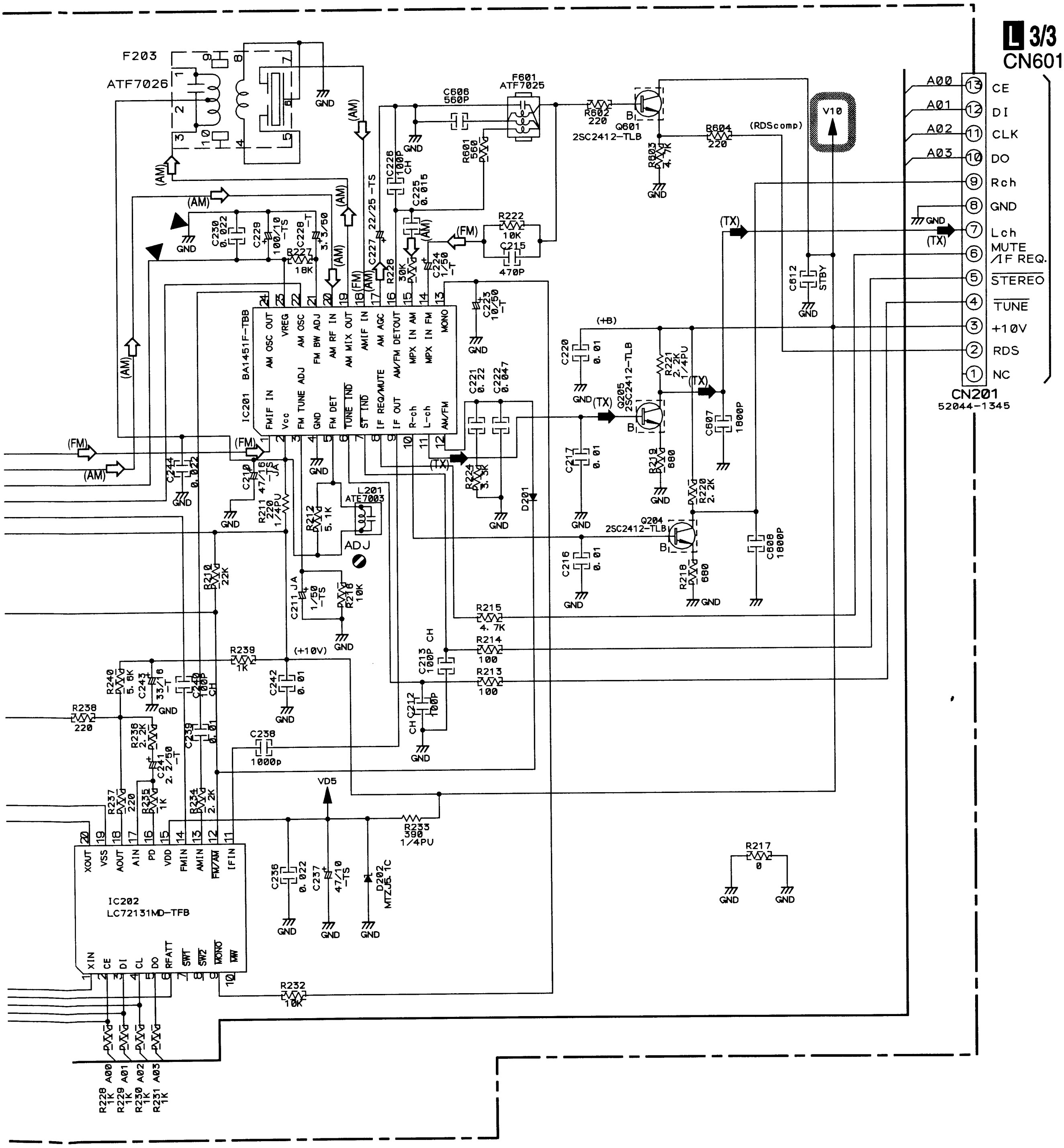
Notes

1. RESISTORS
   Indicated in Ω, 1/16W±5% Tolerance unless otherwise noted K;kΩ, M;MΩ.
2. CAPACITORS
   Indicated in Capacity(μF)/VOLTAGE(V) unless otherwise noted P;PF.
3. DIODES
   No mark diode is 1SS133.

(TX) ➡ : AUDIO SIGNAL ROUTE (TUNER)

(AM) ⇨ : AM SIGNAL ROUTE

(FM) ⇨ : FM SIGNAL ROUTE

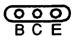
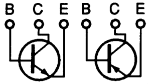
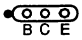
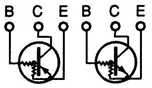
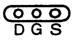
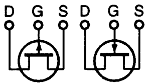
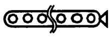
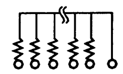
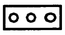
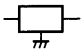

L 3/3
CN601
CN201
52044-1345
13 CE
12 DI
11 CLK
10 DO
9 Rch
8 GND
7 Lch
6 MUTE /IF REQ.
5 STEREO
4 TUNE
3 +10V
2 RDS
1 NC
A00
A01
A02
A03
F203
ATF7026
F601
ATF7025
C606 560P
R602 220
Q601 2SC2412-TLB
R604 220
(RDScomp)
R603 4.7K
V10
R601 560
C226 100P CH
C225 0.015
R222 10K
C215 470P
C612
STBY
C230 0.022
C229 100/10 -TS
C228 3.3/50 -T
R227 18K
C227 22/25 -TS
R226 30K
C224 1/50 -T
C223 10/50 -T
IC201 BA1451F-TBB
AM OSC OUT
VREG
AM OSC
FM BW ADJ
AM RF IN
AM MIX OUT
AMIF IN
AM AGC
AM/FM DETOUT
MPX IN AM
MPX IN FM
MONO
FMIF IN
Vcc
FM TUNE ADJ
GND
FM DET
TUNE IND
ST IND
IF REQ/MUTE
IF OUT
R-ch
L-ch
AM/FM
C221 0.22
C222 0.047
(+B)
C220 0.01
R221 2.2K 1/4PU
Q205 2SC2412-TLB
C607 1800P
C217 0.01
R219 680
R220 2.2K
Q204 2SC2412-TLB
C608 1800P
C216 0.01
R218 680
R224 3.3K
D201
C244 0.022
C210 47/16 -TS JA
R211 220 1/4PU
R212 5.1K
L201 ATE7003
ADJ
R210 22K
C211 JA 1/50 -TS
R216 10K
R215 4.7K
R214 100
R213 100
C213 100P CH
C212 100P CH
R239 1K
(+10V)
C242 0.01
R240 5.6K
C243 33/16 -T
C240 100P CH
R238 220
R236 2.2K
C241 2.2/50 -T
C239 0.01
C238 1000p
VD5
R233 390 1/4PU
R237 220
R235 1K
R234 2.2K
C236 0.022
C237 47/10 -TS
D202 MTZJ5.1C
R217 0
IC202 LC72131MD-TFB
XOUT
VSS
AOUT
AIN
PD
VDD
FMIN
AMIN
FM/AM
IFIN
XIN
CE
DI
CL
DO
RFATT
SWT
SW2
MONO
AM
R232 10K
R228 A00 1K
R229 A01 1K
R230 A02 1K
R231 A03 1K
(AM)
(FM)
(TX)
GND

AK

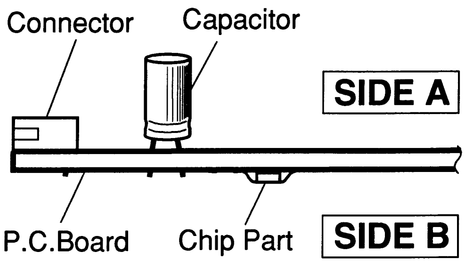
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.

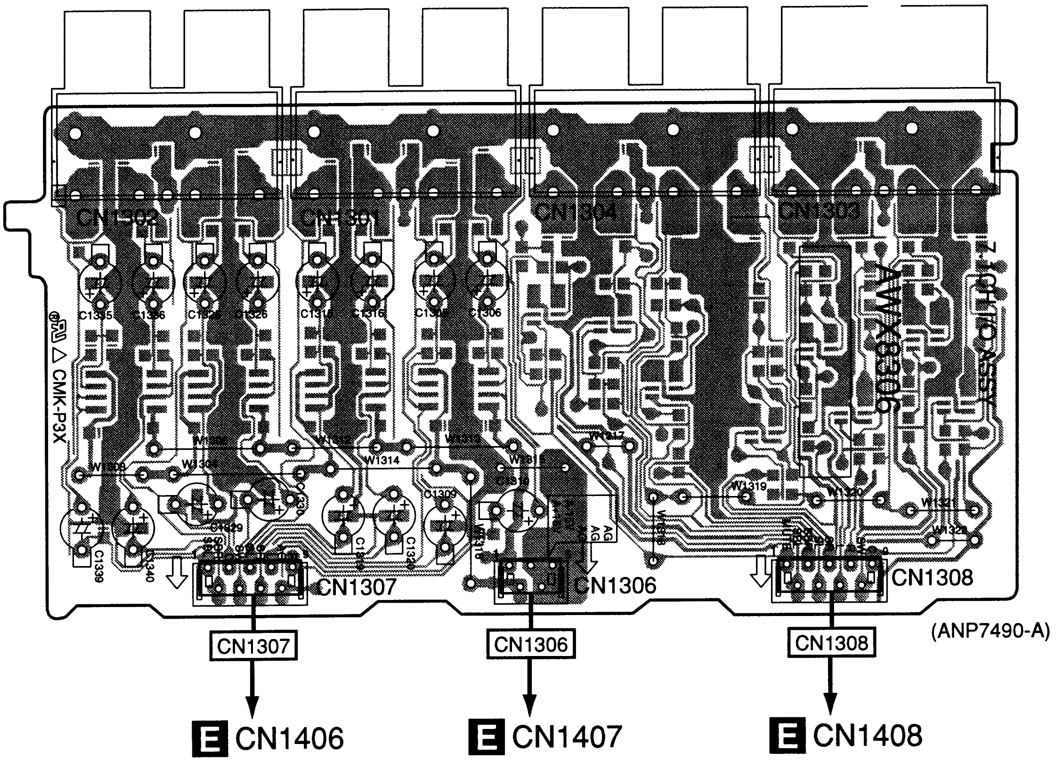

Connector
Capacitor
SIDE A
P.C.Board
Chip Part
SIDE B

4.1 7.1CH I/O ASSY

SIDE A **SIDE A**

- **For VSX-AX5i-S**

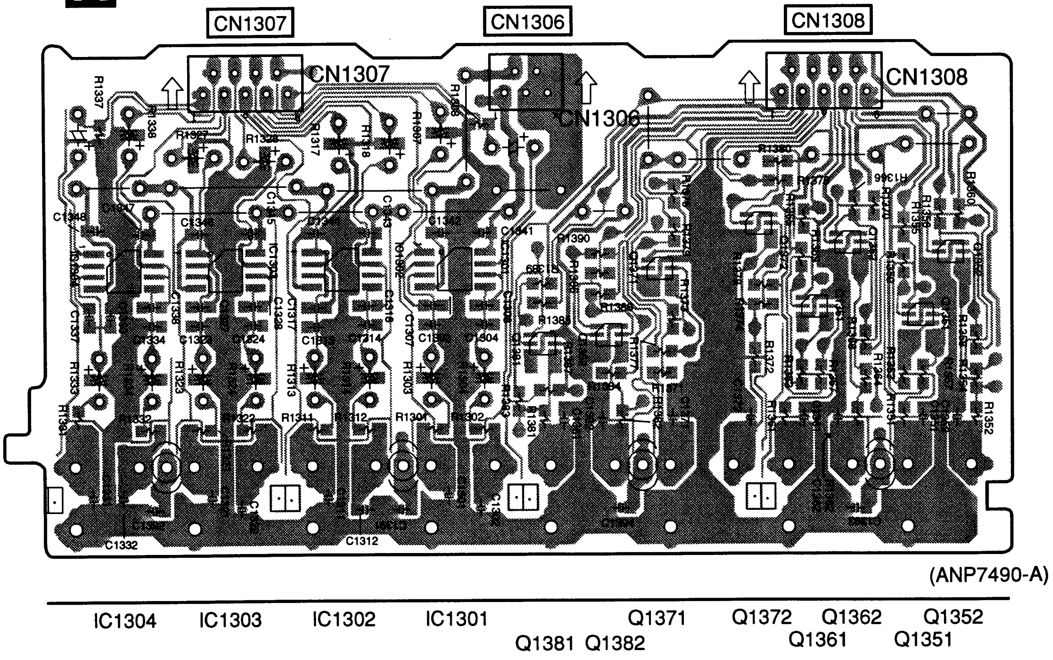
A 7.1CH I/O ASSY



CN1302
CN1301
CN1304
CN1303
AWX8306
7.1CH I/O ASSY
CMK-P3X
C1335
C1336
C1326
C1316
C1306
W1309
W1304
W1314
W1317
W1319
W1320
W1321
C1329
C1339
C1340
CN1307
CN1306
CN1308
(ANP7490-A)
CN1307
CN1306
CN1308
E CN1406
E CN1407
E CN1408

SIDE B **SIDE B**

A 7.1CH I/O ASSY



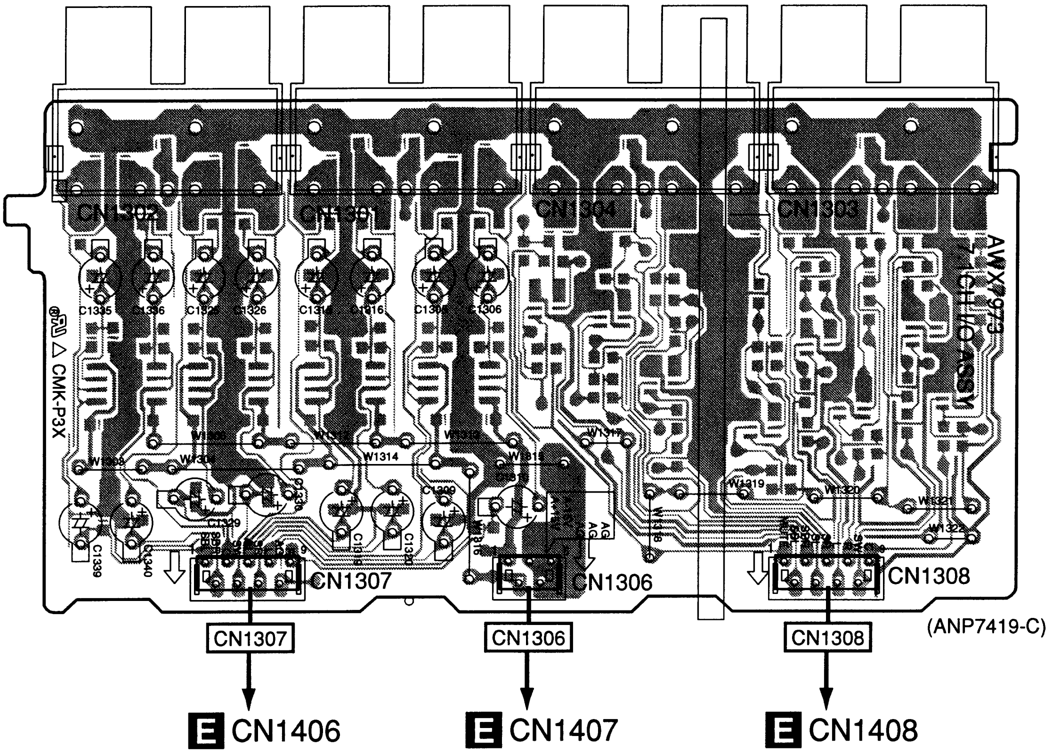
CN1307
CN1306
CN1308
CN1307
CN1306
CN1308
R1337
R1338
R1336
R1317
R1318
R1307
R1390
R1366
C1345
C1347
C1344
C1343
C1342
C1341
C1337
C1334
C1324
C1314
C1304
IC1303
IC1302
IC1301
R1333
R1323
R1313
R1303
R1332
R1322
R1311
R1312
R1301
R1302
R1381
R1372
R1352
C1332
C1312
(ANP7490-A)
IC1304
IC1303
IC1302
IC1301
Q1371
Q1372
Q1362
Q1352
Q1381
Q1382
Q1361
Q1351

A

SIDE A **SIDE A**

• For VSX-AX3-S, -K

A 7.1CH I/O ASSY


CN1302
CN1301
CN1304
CN1303
AWX7973
7.1CH I/O ASSY
CMK-P3X
CN1307
CN1306
CN1308
(ANP7419-C)
CN1307
CN1306
CN1308
E CN1406
E CN1407
E CN1408

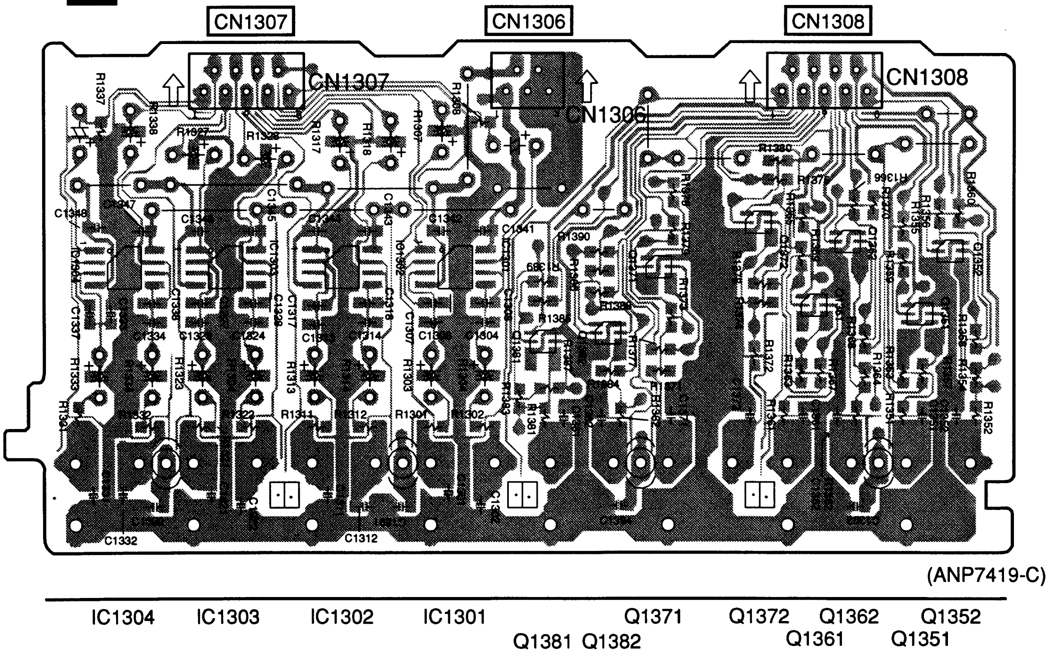
B

C

D

SIDE B **SIDE B**

A 7.1CH I/O ASSY


CN1307
CN1306
CN1308
CN1307
CN1306
CN1308
C1332
C1312
(ANP7419-C)
IC1304
IC1303
IC1302
IC1301
Q1371
Q1372
Q1362
Q1352
Q1381
Q1382
Q1361
Q1351

E

F

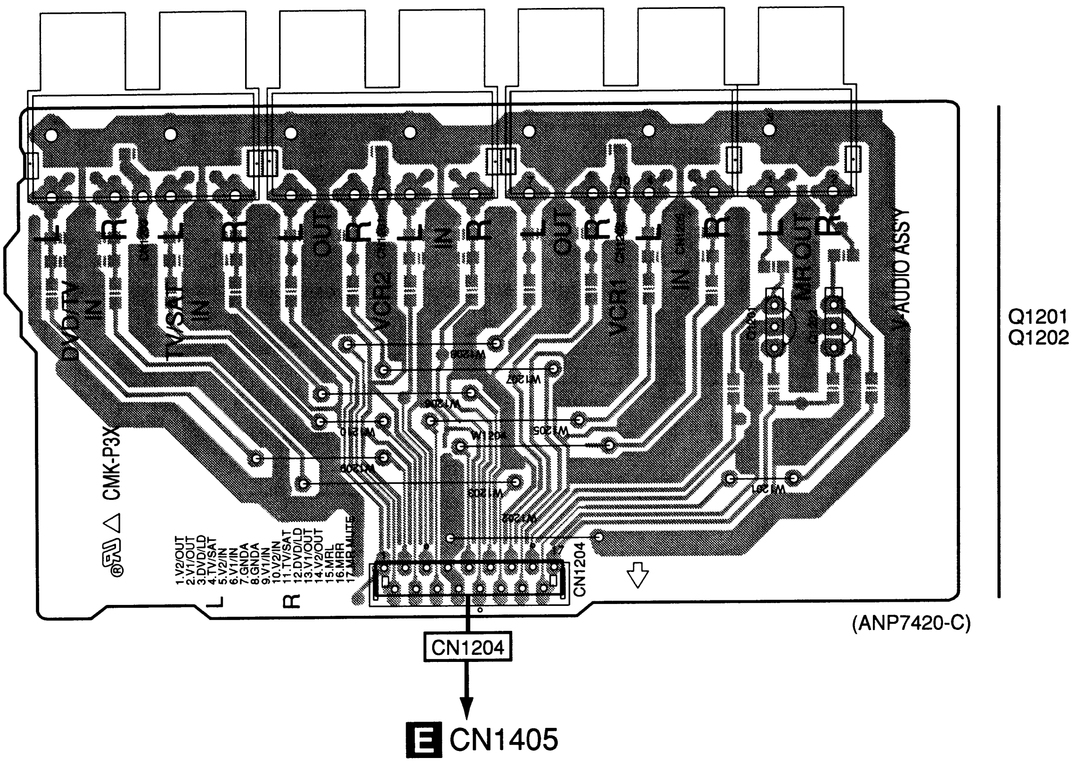
A **A**

4.2 V-AUDIO IN ASSY

SIDE A

SIDE A

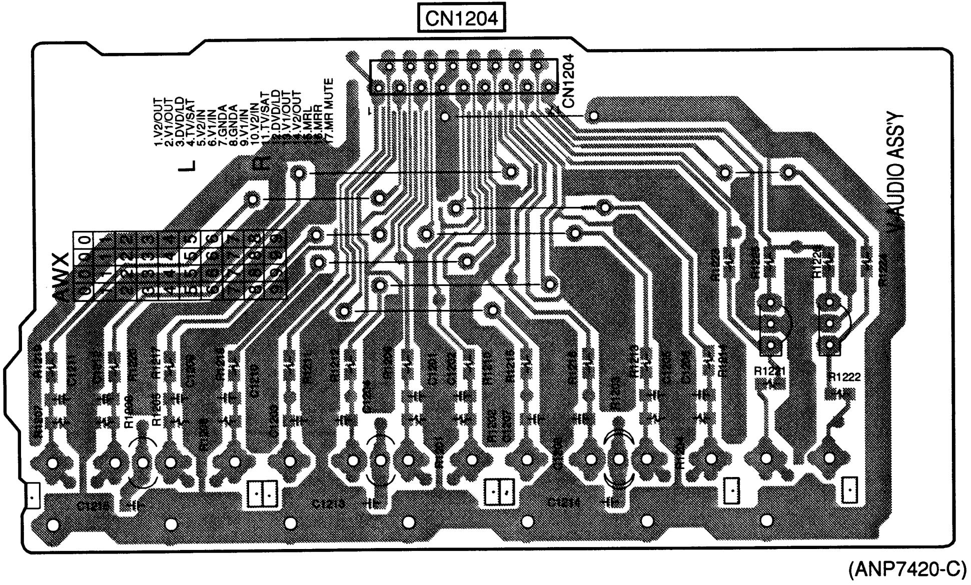
B V-AUDIO IN ASSY


L
R
DVD/TV IN
TV/SAT IN
OUT
VCR2
IN
VCR1
MR OUT
V-AUDIO ASSY
CMK-P3X
1.V2/OUT
2.V1/OUT
3.DVD/LD
4.TV/SAT
5.V2/IN
6.V1/IN
7.GNDA
8.GNDA
9.V1/IN
10.V2/IN
11.TV/SAT
12.DVD/LD
13.V1/OUT
14.V2/OUT
15.MRL
16.MRR
17.MR MUTE
CN1204
Q1201
Q1202
(ANP7420-C)
CN1204
E CN1405

SIDE B

SIDE B

B V-AUDIO IN ASSY

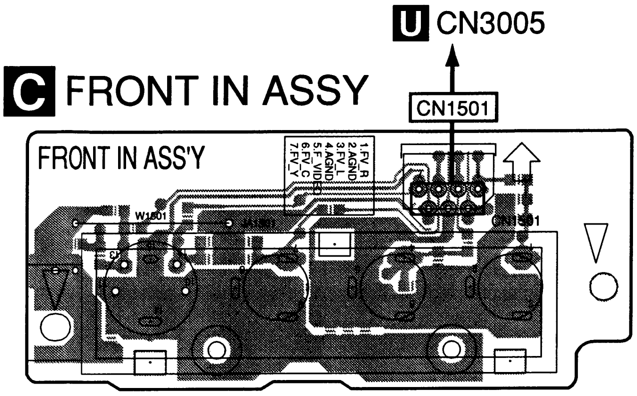

CN1204
CN1204
1.V2/OUT
2.V1/OUT
3.DVD/LD
4.TV/SAT
5.V2/IN
6.V1/IN
7.GNDA
8.GNDA
9.V1/IN
10.V2/IN
11.TV/SAT
12.DVD/LD
13.V1/OUT
14.V2/OUT
15.MRL
16.MRR
17.MR MUTE
L
R
AWX
V-AUDIO ASSY
R1221
R1222
R1223
C1212
C1213
C1214
(ANP7420-C)

4.3 FRONT IN and OPTICAL IN ASSYS

SIDE A

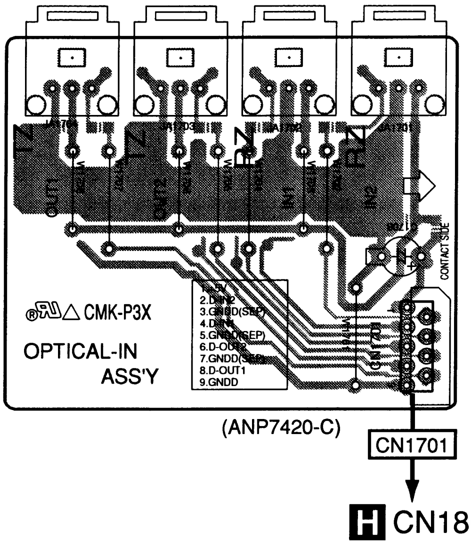
SIDE A

C FRONT IN ASSY


U CN3005
CN1501
FRONT IN ASS'Y
1.FV_R
2.AGND
3.FV_L
4.AGND
5.F_VIDEO
6.FV_C
7.FV_Y
W1501
CN1501

(ANP7420-C)

D OPTICAL IN ASSY

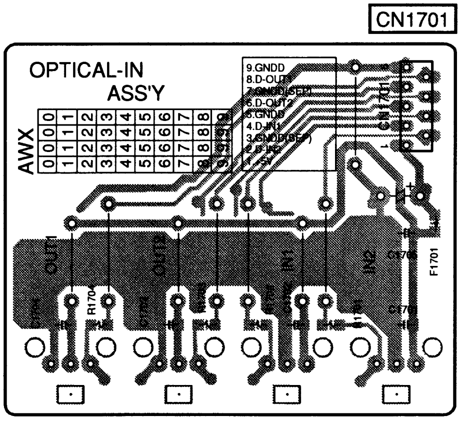

OUT1
OUT2
IN1
IN2
CMK-P3X
OPTICAL-IN
ASS'Y
1.+5V
2.D-IN2
3.GNDD(SEP)
4.D-IN1
5.GNDD(SEP)
6.D-OUT2
7.GNDD(SEP)
8.D-OUT1
9.GNDD
CN1701
CONTACT SIDE
CN1701
H CN1801

(ANP7420-C)

SIDE B

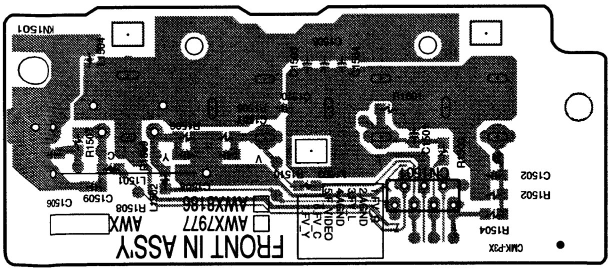
SIDE B

D OPTICAL IN ASSY


CN1701
OPTICAL-IN
ASS'Y
AWX
9.GNDD
8.D-OUT1
7.GNDD(SEP)
6.D-OUT2
5.GNDD
4.D-IN1
3.GNDD(SEP)
2.D-IN2
1.+5V
OUT1
OUT2
IN1
IN2
R1701
C1701
F1701

(ANP7420-C)

C FRONT IN ASSY

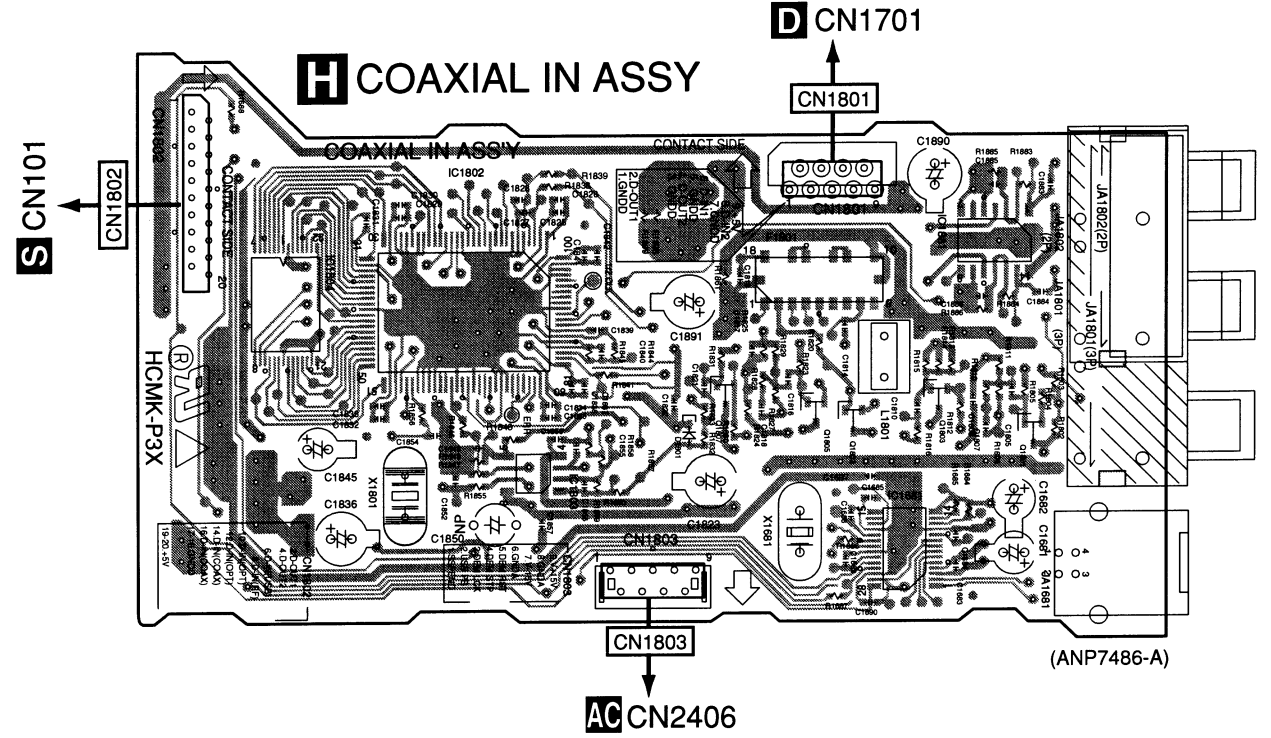

FRONT IN ASS'Y
AWX
AWX7977
AWX8186
CN1501
C1502
R1502
R1504
R1508
C1509
C1506
L1501
CMK-P3X

CN1501

(ANP7420-C)

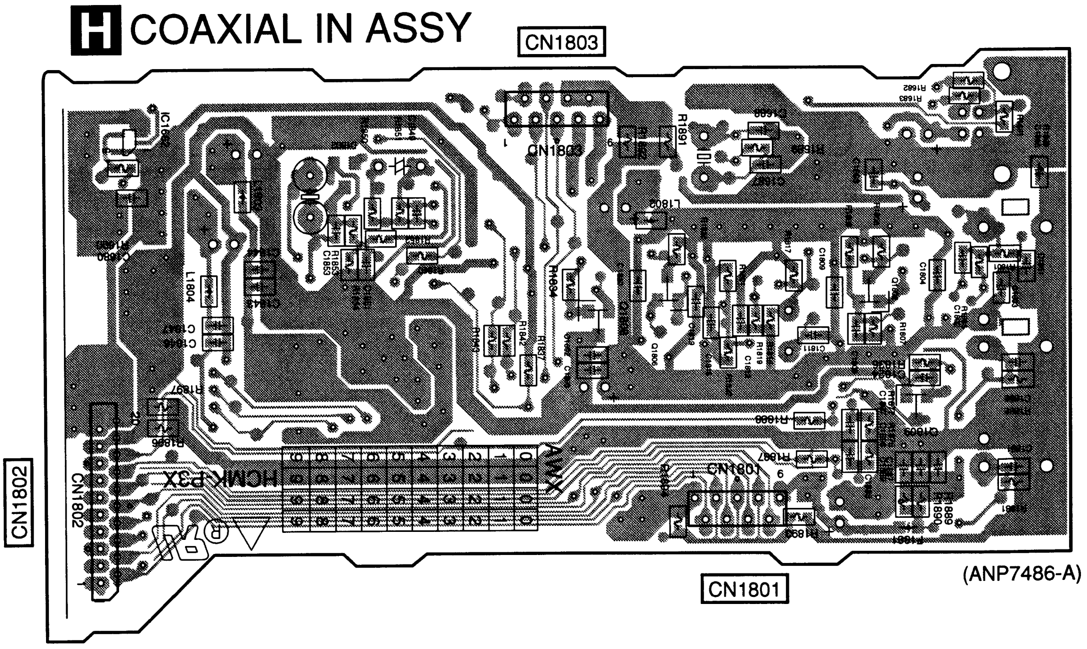
4.4 COAXIAL IN ASSY

SIDE A **SIDE A**


H COAXIAL IN ASSY
D CN1701
CN1801
S CN101
CN1802
HCMK-P3X
COAXIAL IN ASS'Y
CONTACT SIDE
IC1802
C1890
JA1802(2P)
JA1801(3P)
C1891
C1845
C1836
X1801
C1850
CN1803
C1823
X1681
C1682
C1681
JA1681
(ANP7486-A)
CN1803
AC CN2406

IC1804 IC1802 IC1803 Q1807 Q1805 Q1804 Q1803 IC1881 Q1801 IC1681

SIDE B **SIDE B**

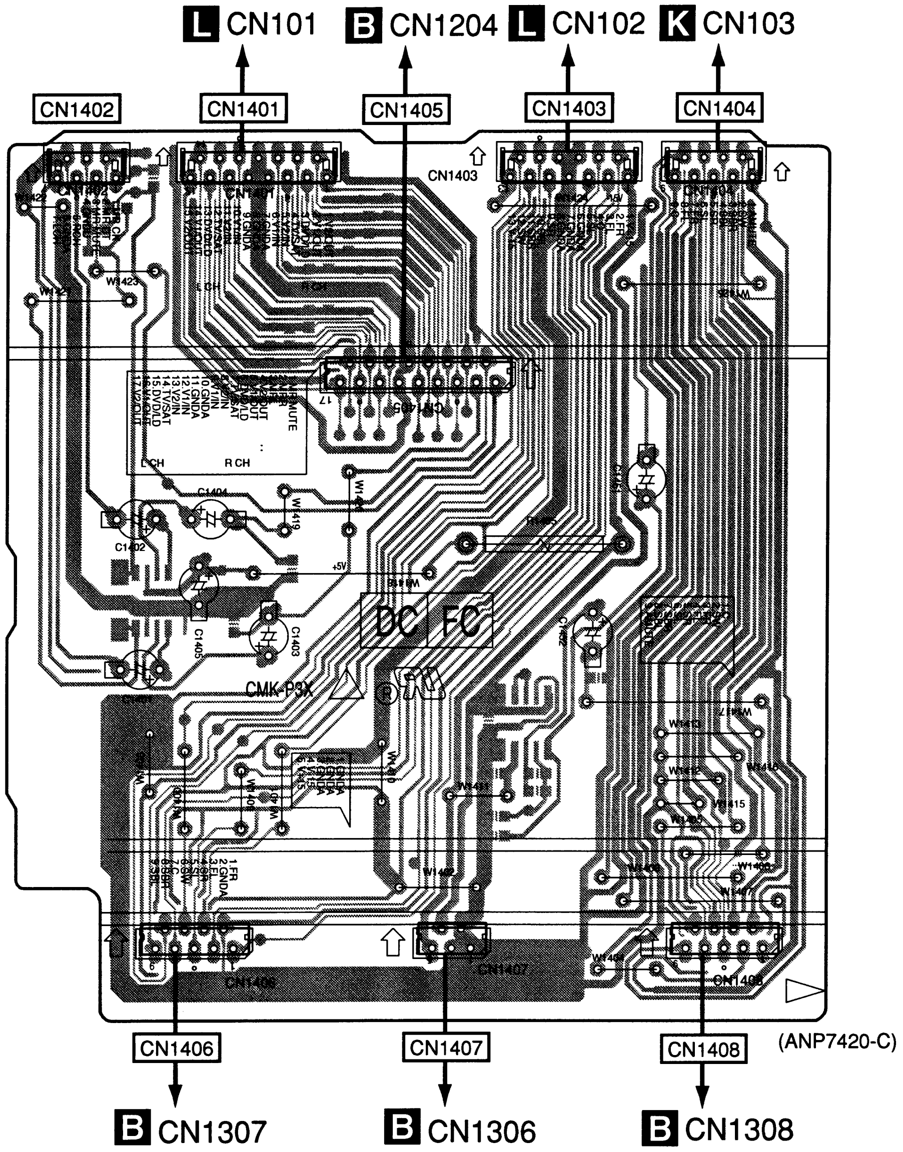

H COAXIAL IN ASSY
CN1803
CN1803
IC1682
L1804
R1891
CN1802
CN1802
HCMK-P3X
AWX
CN1801
CN1801
(ANP7486-A)

IC1682 Q1808 Q1806 Q1802 Q1809

4.5 INPUT CONNECT ASSY

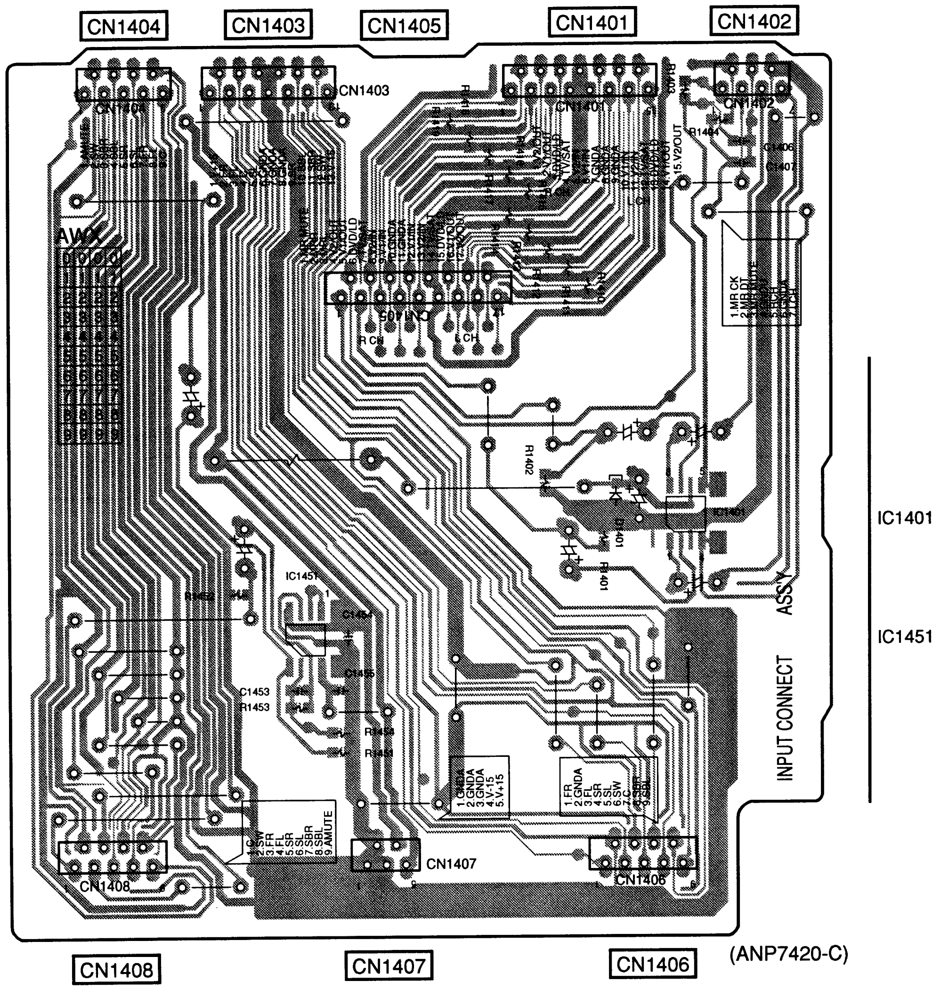
SIDE A **SIDE A**

E INPUT CONNECT ASSY


L CN101
B CN1204
L CN102
K CN103
CN1402
CN1401
CN1405
CN1403
CN1404
CN1403
L CH
R CH
C1404
C1402
C1405
C1403
R1465
+5V
DC
FC
CMK-P3X
CN1406
CN1407
CN1408
(ANP7420-C)
B CN1307
B CN1306
B CN1308

SIDE B **SIDE B**

E INPUT CONNECT ASSY

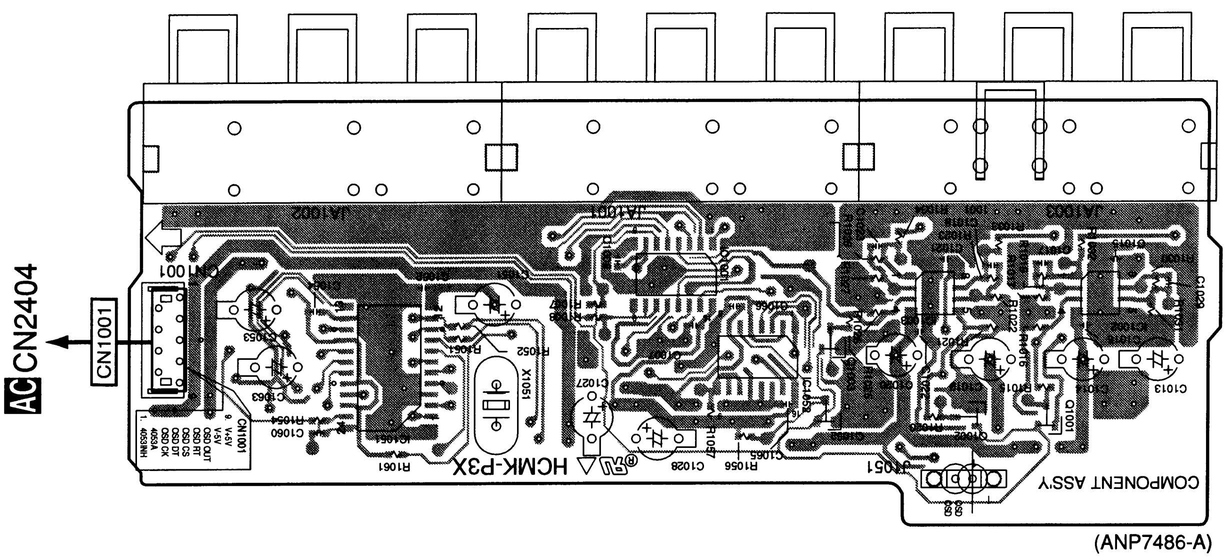

CN1404
CN1403
CN1405
CN1401
CN1402
AWX
IC1401
IC1451
INPUT CONNECT ASSY
CN1408
CN1407
CN1406

(ANP7420-C)

4.6 COMPONENT ASSY

SIDE A **SIDE A**

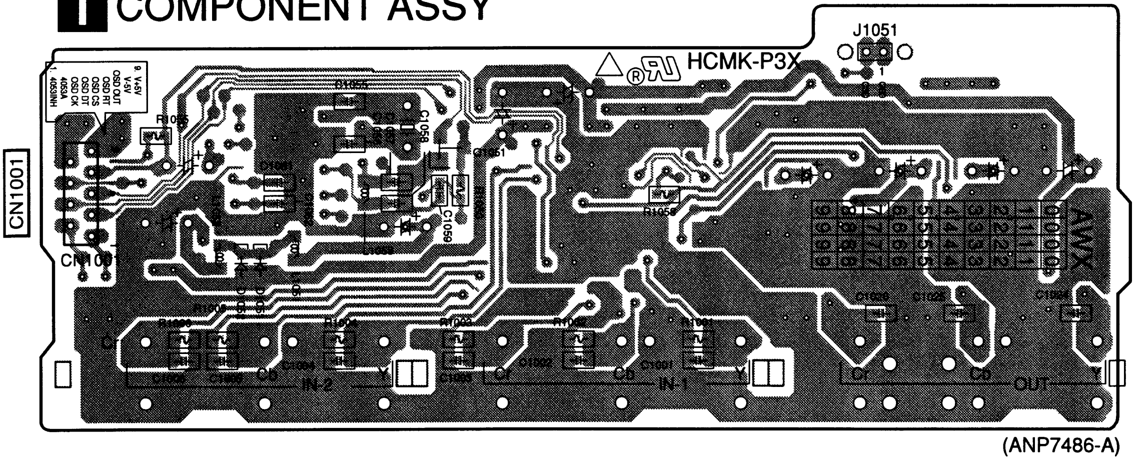
I COMPONENT ASSY


AC CN2404
CN1001
JA1002
JA1001
JA1003
CN1001
X1051
HCMK-P3X
COMPONENT ASS'Y
J1051
(ANP7486-A)

IC1051 IC1001 IC1052 Q1003 IC1003 IC1002
Q1052 Q1002 Q1001

SIDE B **SIDE B**

I COMPONENT ASSY

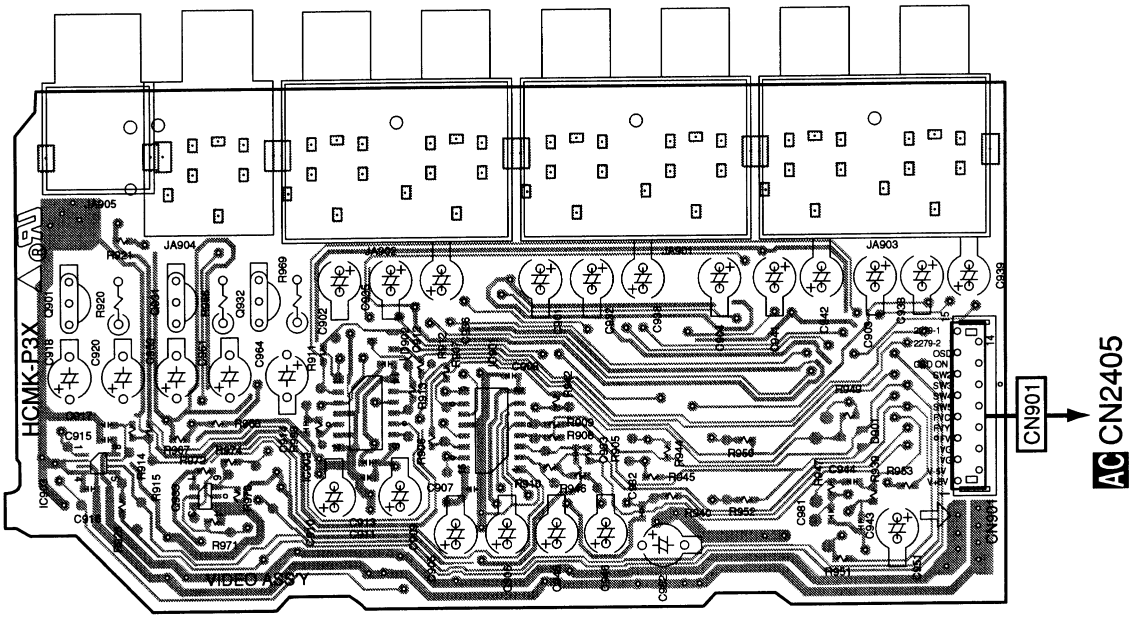

J1051
HCMK-P3X
CN1001
R1055
R1052
C1058
Q1051
C1059
R1056
AWX
R1003
R1002
R1001
Cr
Cb
IN-2
Y
IN-1
OUT
(ANP7486-A)

Q1051

4.7 VIDEO ASSY

SIDE A **SIDE A**

K VIDEO ASSY

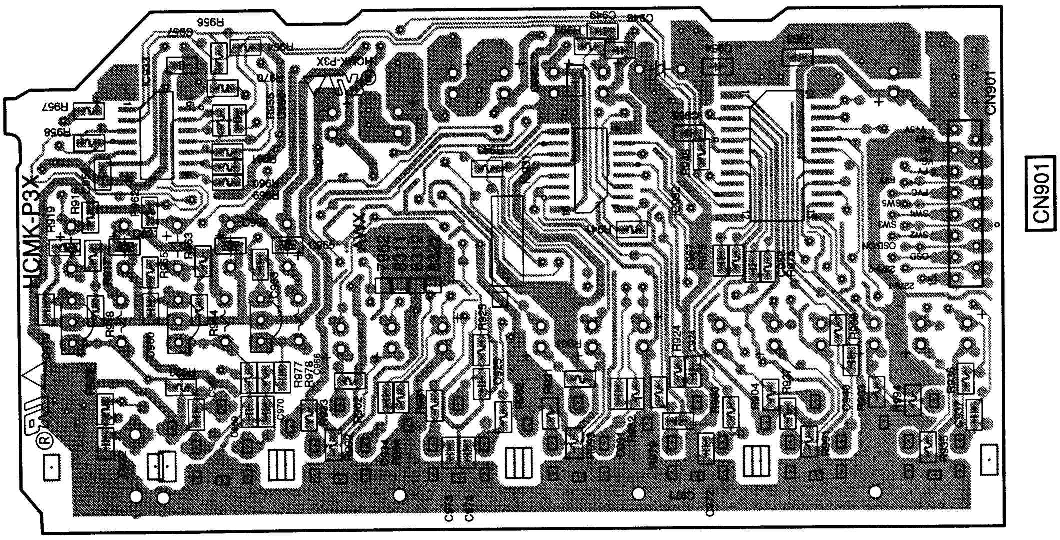

JA905
JA904
JA902
JA901
JA903
HCMK-P3X
VIDEO ASSY
CN901
AC CN2405
C915
R971

(ANP7486-A)

Q901 Q931 Q932 IC902 IC901
IC903 Q933

SIDE B **SIDE B**

K VIDEO ASSY

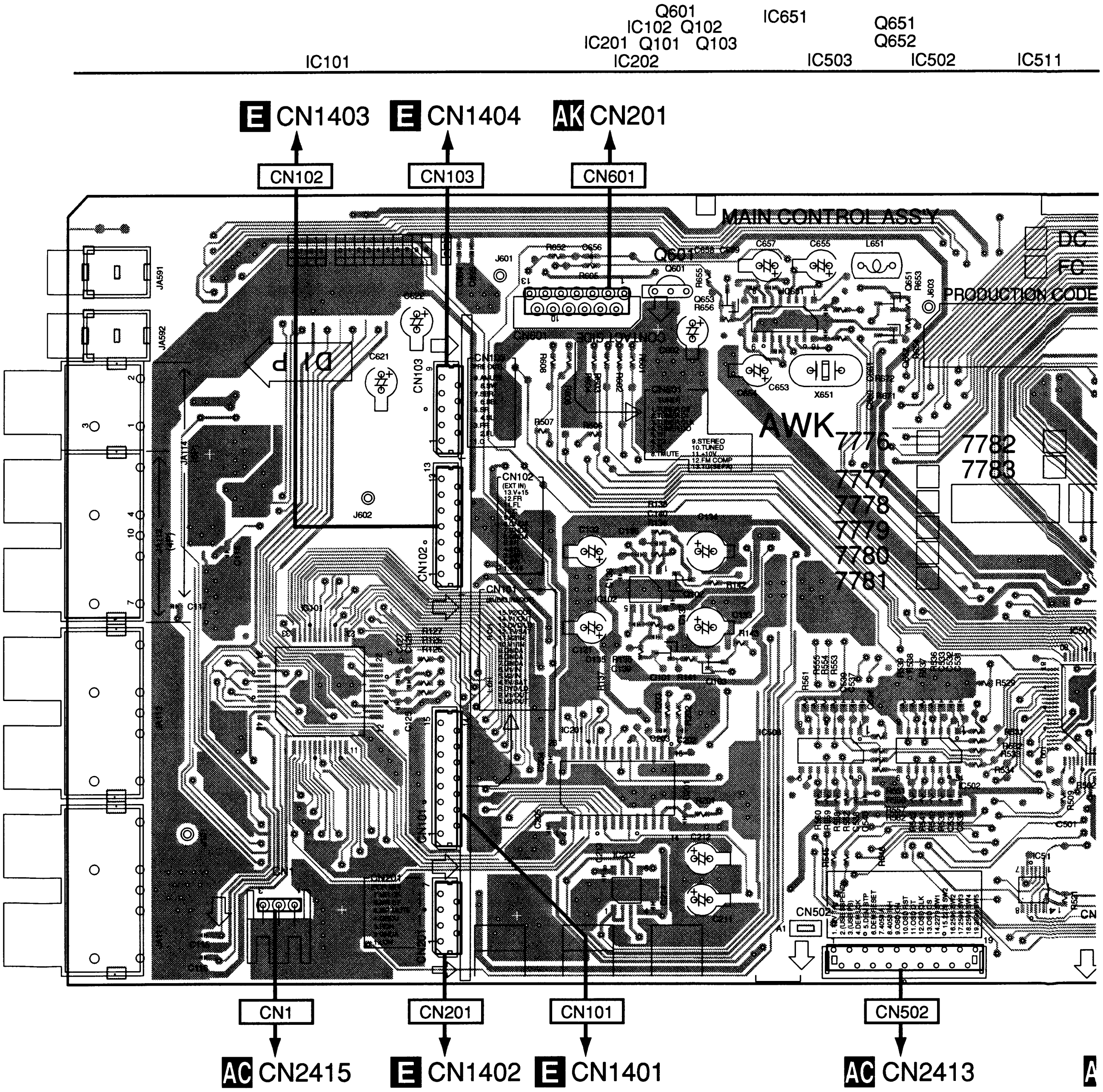

HCMK-P3X
CN901
R957
R958
R956

(ANP7486-A)

IC933 IC931 IC932

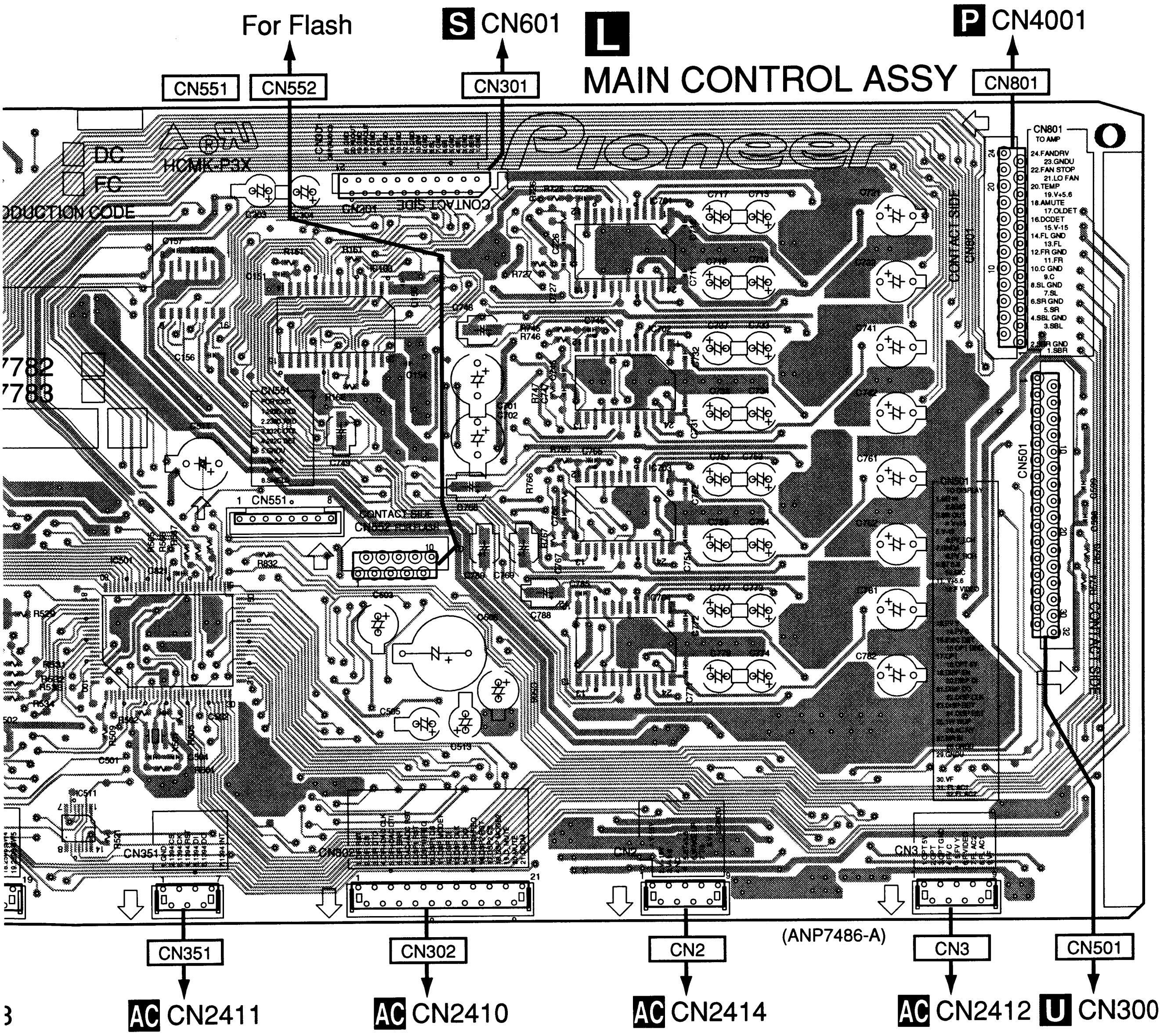
4.8 MAIN CONTROL ASSY

SIDE A


Q601
IC102 Q102
IC201 Q101 Q103
IC651
Q651
Q652
IC101
IC202
IC503
IC502
IC511
E CN1403
E CN1404
AK CN201
CN102
CN103
CN601
MAIN CONTROL ASSY
DC
FC
PRODUCTION CODE
AWK
7776
7777
7778
7779
7780
7781
7782
7783
JA591
JA592
J601
J602
J603
C621
C622
C653
C655
C657
L651
X651
CN502
CN1
CN201
CN101
AC CN2415
E CN1402
E CN1401
AC CN2413
A

SIDE A

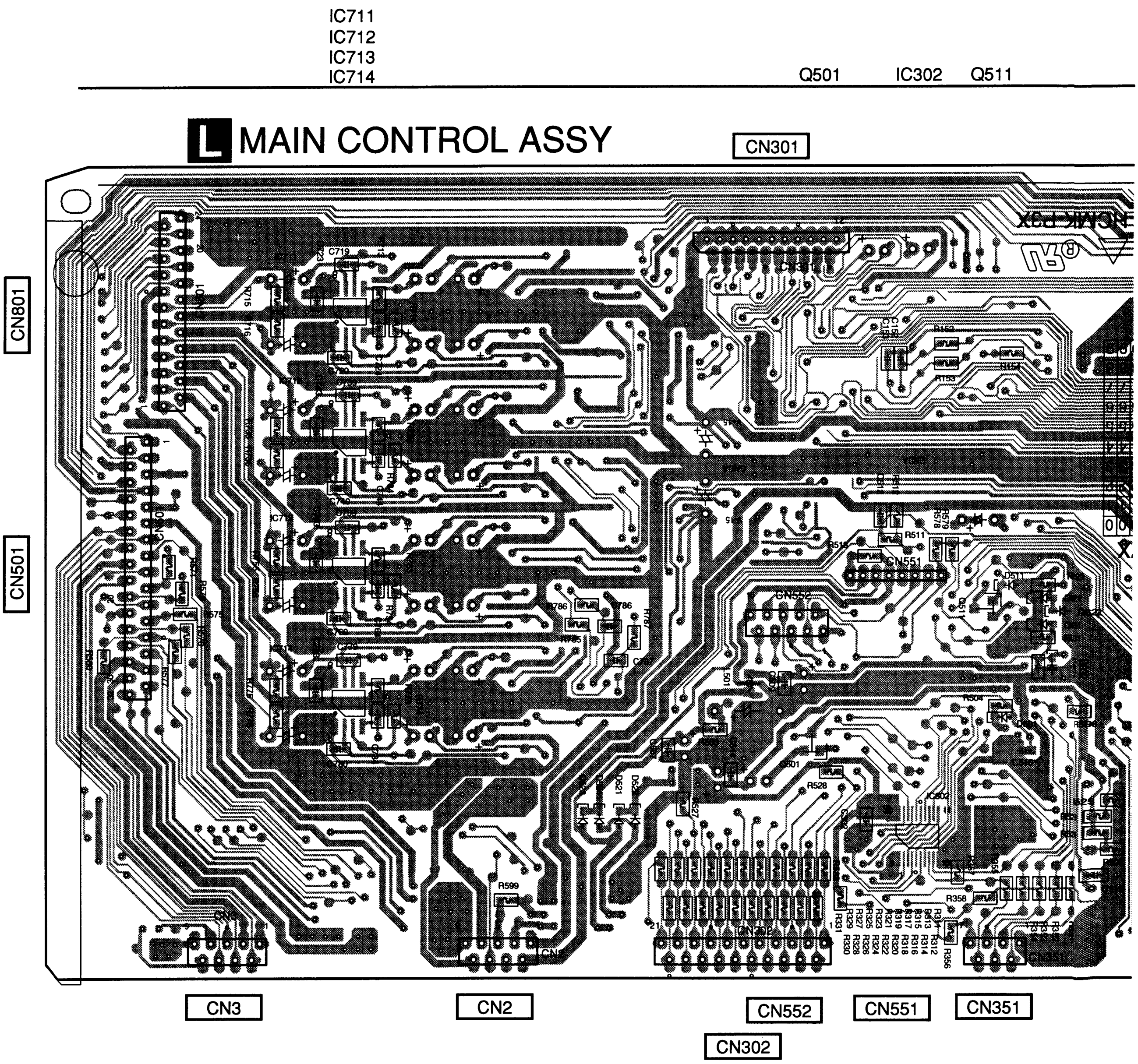
IC104
IC511 IC501 IC103 IC702 IC701
IC704 IC703


For Flash
S CN601
L
MAIN CONTROL ASSY
P CN4001
CN551
CN552
CN301
CN801
DC
FC
HCMK-P3X
CONTACT SIDE
CN801
TO AMP
24.FANDRV
23.GNDU
22.FAN STOP
21.LO FAN
20.TEMP
19.V+5.6
18.AMUTE
17.OLDET
16.DCDET
15.V-15
14.FL GND
13.FL
12.FR GND
11.FR
10.C GND
9.C
8.SL GND
7.SL
6.SR GND
5.SR
4.SBL GND
3.SBL
2.SBR GND
1.SBR
CN501
CONTACT SIDE
CN552 FOR FLASH
CN351
CN302
CN2
CN3
(ANP7486-A)
CN351
CN302
CN2
CN3
CN501
AC CN2411
AC CN2410
AC CN2414
AC CN2412
U CN3006

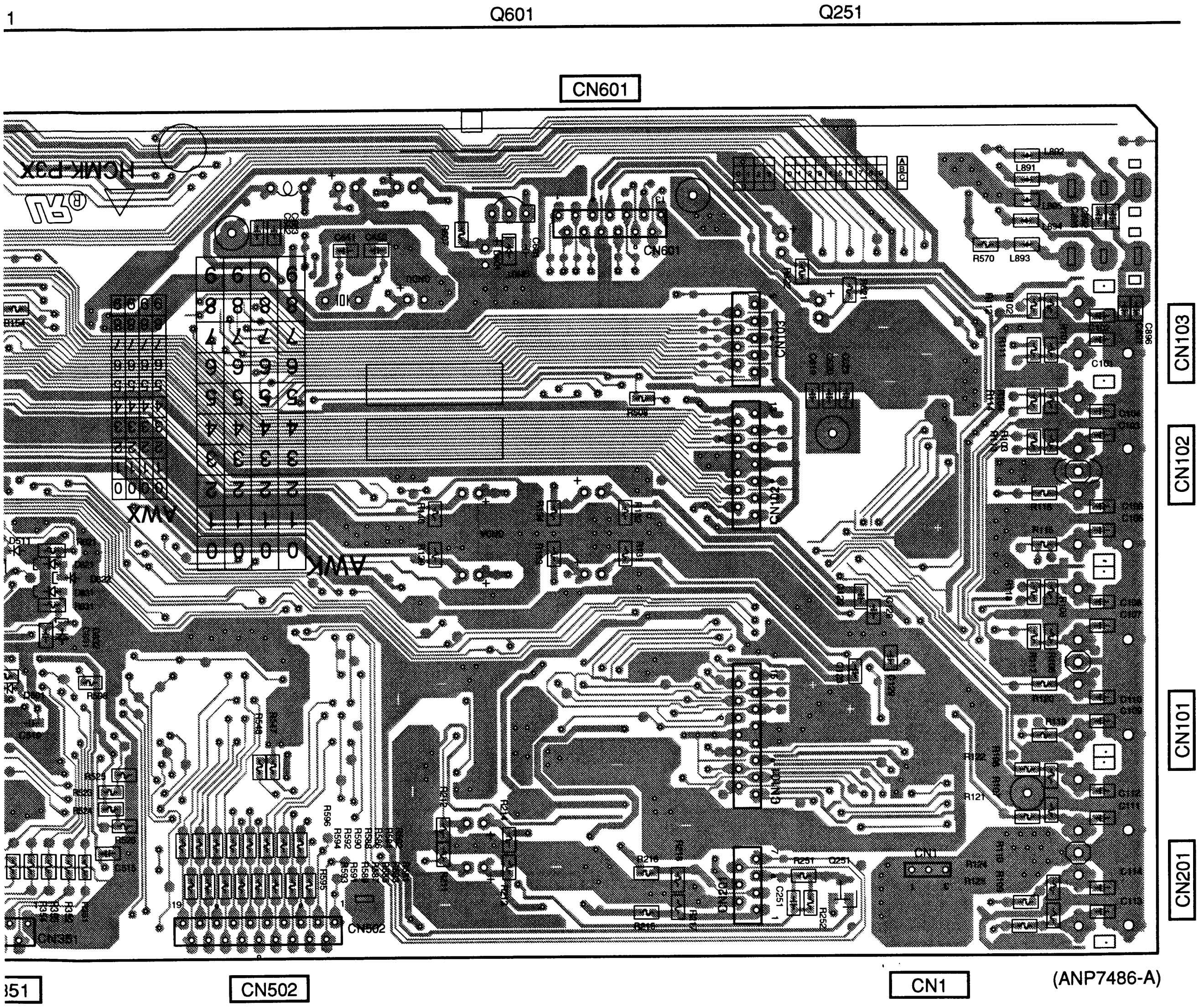
L

SIDE B

L MAIN CONTROL ASSY


IC711
IC712
IC713
IC714
Q501
IC302
Q511
CN301
CN801
CN501
CN3
CN2
CN552
CN551
CN351
CN302

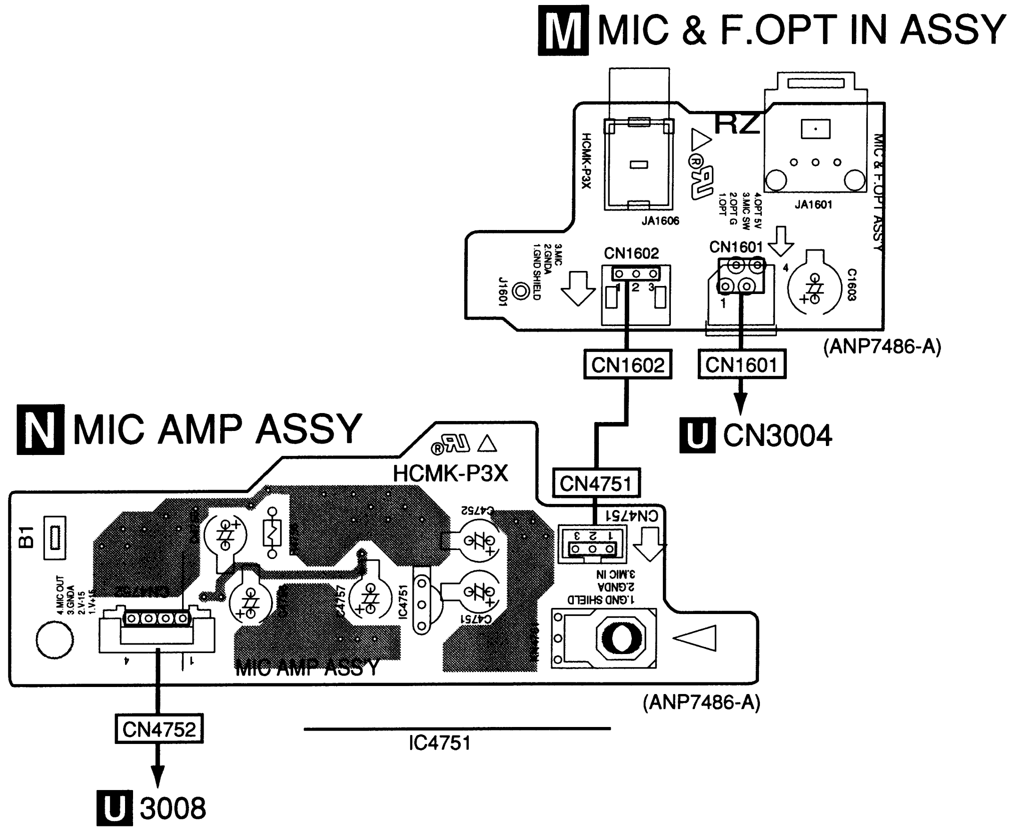
SIDE B

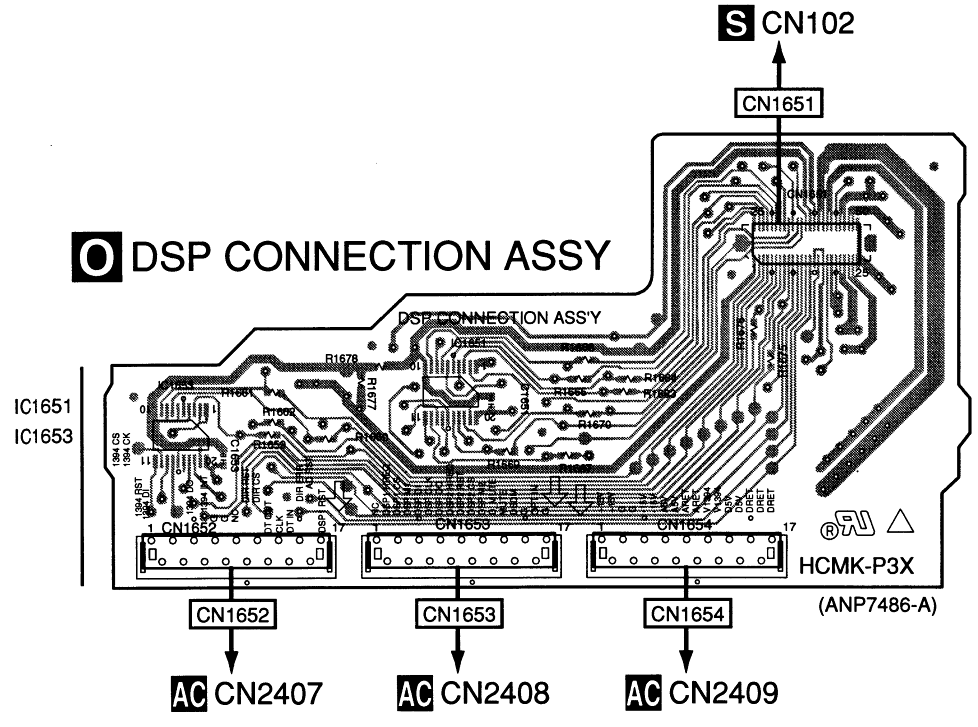

1
Q601
Q251
CN601
CN103
CN102
CN101
CN201
351
CN502
CN1
CN631
CN502
HCMK-P3X
AWK
R570
L891
L892
L893
R121
R251
Q251
C251
R252
R216
R596
R590
R592
R594

(ANP7486-A)

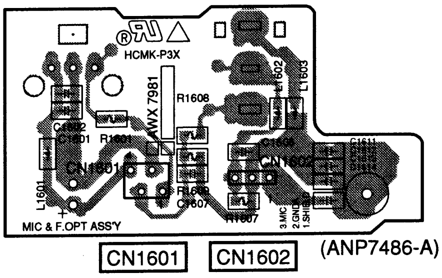
4.9 MIC & F. OPT IN, MIC AMP and DSP CONNECTION ASSYS

SIDE A **SIDE A**

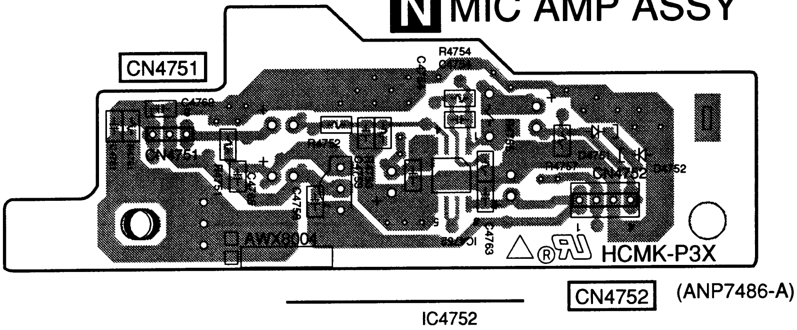

M MIC & F.OPT IN ASSY
RZ
HCMK-P3X
MIC & F.OPT ASSY
JA1606
JA1601
4.OPT 5V
3.MIC SW
2.OPT G
1.OPT
3.MIC
2.GNDA
1.GND SHIELD
J1601
CN1602
CN1601
C1603
(ANP7486-A)
CN1602
CN1601
U CN3004
N MIC AMP ASSY
HCMK-P3X
CN4751
CN4751
C4752
C4751
IC4751
3.MIC IN
2.GNDA
1.GND SHIELD
B1
4.MIC OUT
3.GNDA
2.V-15
1.V+15
MIC AMP ASS'Y
(ANP7486-A)
CN4752
IC4751
U 3008


S CN102
CN1651
O DSP CONNECTION ASSY
DSP CONNECTION ASS'Y
IC1651
IC1653
R1678
R1677
R1661
R1662
R1658
R1655
R1663
R1664
R1670
R1669
1
CN1652
17
1
CN1653
17
1
CN1654
17
HCMK-P3X
(ANP7486-A)
CN1652
CN1653
CN1654
AC CN2407
AC CN2408
AC CN2409

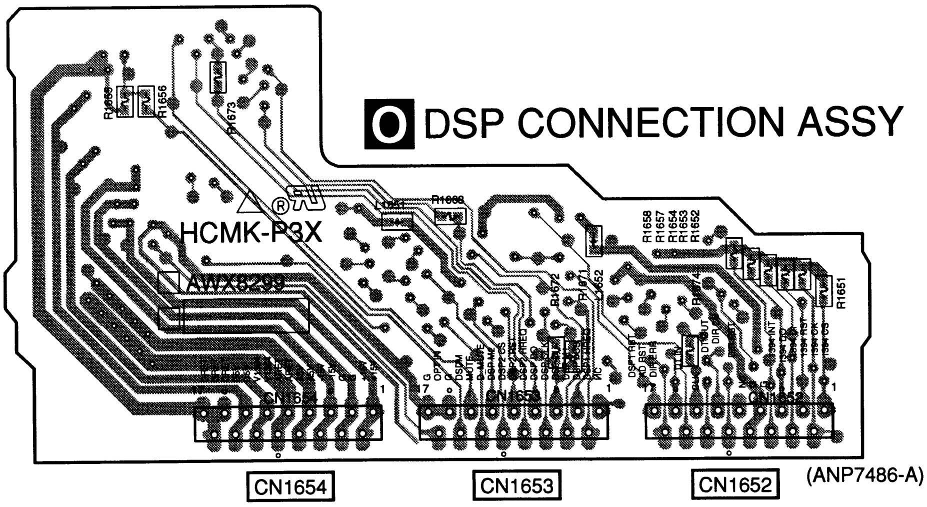
M MIC & F.OPT IN ASSY


HCMK-P3X
AWX 7981
R1608
L1602
L1603
C1602
C1601
R1601
CN1601
C1606
CN1602
C1611
R1605
C1607
R1607
3.MIC
2.GND
1.SHIELD
L1601
MIC & F.OPT ASS'Y
CN1601
CN1602
(ANP7486-A)

N MIC AMP ASSY


CN4751
R4754
C4760
R4752
CN4751
R4753
D4751
CN4752
D4752
C4763
IC4752
AWX8004
HCMK-P3X
CN4752
(ANP7486-A)
IC4752

O DSP CONNECTION ASSY

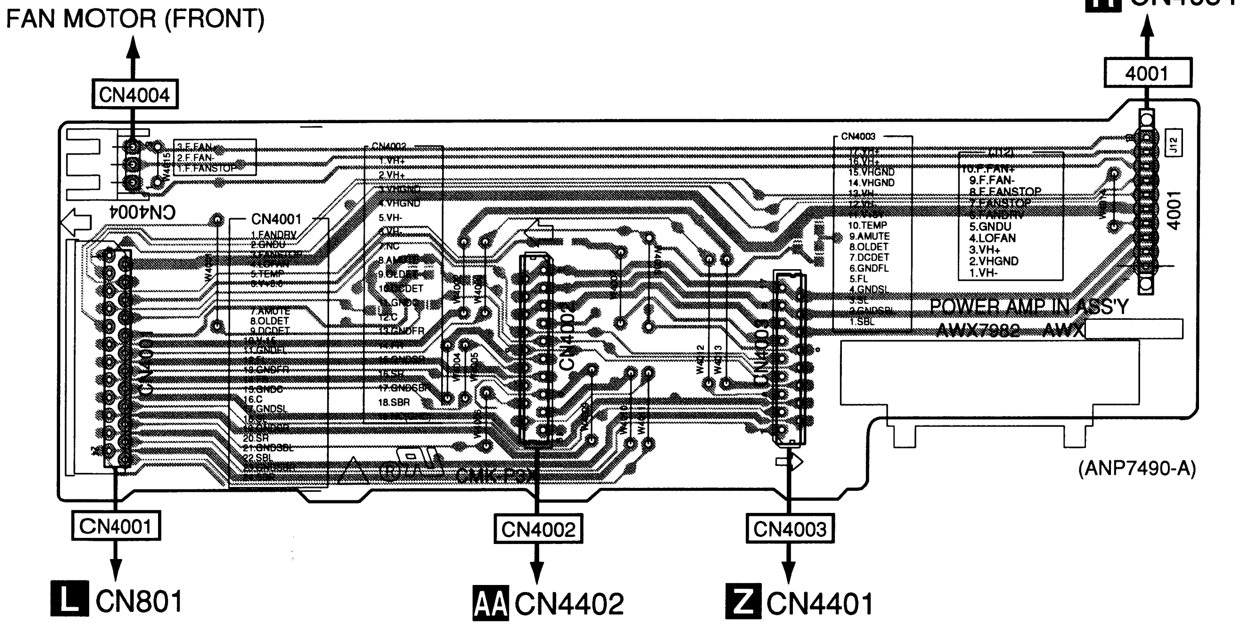

R1655
R1656
R1673
HCMK-P3X
AWX8299
R1660
R1658
R1657
R1654
R1653
R1652
R1672
R1671
L1652
R1674
R1651
CN1654
CN1653
CN1652
CN1654
CN1653
CN1652
(ANP7486-A)

4.10 POWER AMP IN ASSY

- **For VSX-AX5i-S**

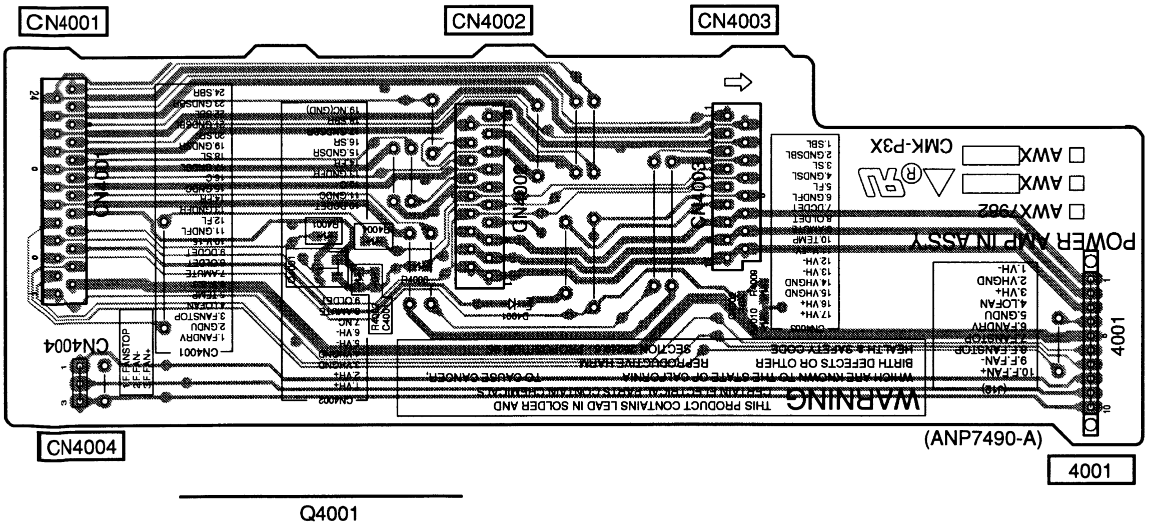
SIDE A **SIDE A**

P POWER AMP IN ASSY


FAN MOTOR (FRONT)
CN4004
R CN4054
4001
CN4001
CN4002
CN4003
POWER AMP IN ASS'Y
AWX7982 AWX
CMK-P3X
(ANP7490-A)
CN4001
CN4002
CN4003
L CN801
AA CN4402
Z CN4401

SIDE B **SIDE B**

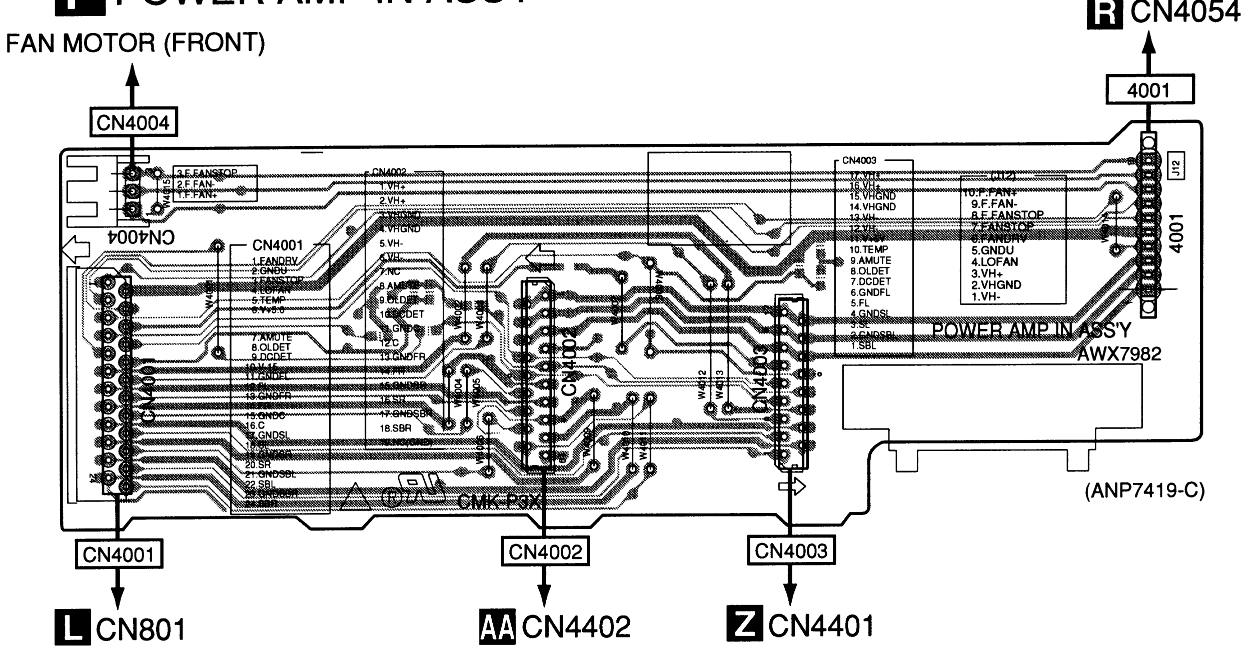
P POWER AMP IN ASSY


CN4001
CN4002
CN4003
CN4004
4001
CMK-P3X
AWX
AWX
AWX7982
POWER AMP IN ASS'Y
WARNING
THIS PRODUCT CONTAINS LEAD IN SOLDER AND CERTAIN ELECTRICAL PARTS CONTAIN CHEMICALS WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.
HEALTH & SAFETY CODE SECTION 25249.6 - PROPOSITION 65
(ANP7490-A)
4001
Q4001

• **For VSX-AX3-S, -K**

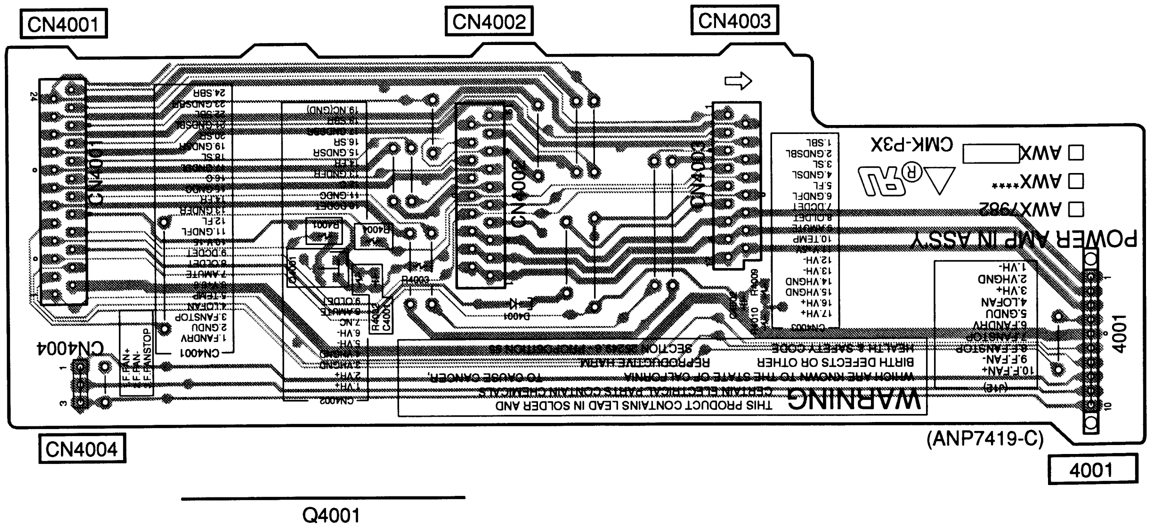
SIDE A **SIDE A**

P POWER AMP IN ASSY


FAN MOTOR (FRONT)
CN4004
R CN4054
4001
CN4004
1.F.FAN+
2.F.FAN-
3.F.FANSTOP
CN4001
1.FANDRV
2.GNDU
3.FANSTOP
4.LOFAN
5.TEMP
6.V+5.6
7.AMUTE
8.OLDET
9.DCDET
CN4002
1.VH+
2.VH+
3.VHGND
4.VHGND
5.VH-
6.VH-
7.NC
13.GNDFR
14.FR
15.GNDSR
16.SR
17.GNDSBR
18.SBR
19.NC(GND)
CN4003
17.VH+
16.VH+
15.VHGND
14.VHGND
13.VH-
12.VH-
11.V+5V
10.TEMP
9.AMUTE
8.OLDET
7.DCDET
6.GNDFL
5.FL
4.GNDSL
3.SL
2.GNDSBL
1.SBL
J12
10.F.FAN+
9.F.FAN-
8.F.FANSTOP
7.FANSTOP
6.FANDRV
5.GNDU
4.LOFAN
3.VH+
2.VHGND
1.VH-
POWER AMP IN ASS'Y
AWX7982
CN4001
CN4002
CN4003
CMK-P3X
(ANP7419-C)
CN4001
CN4002
CN4003
L CN801
AA CN4402
Z CN4401

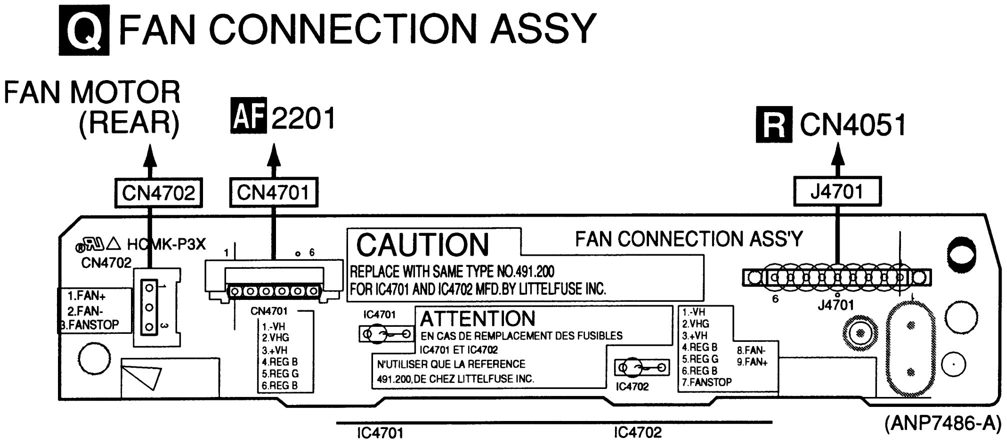
SIDE B **SIDE B**

P POWER AMP IN ASSY

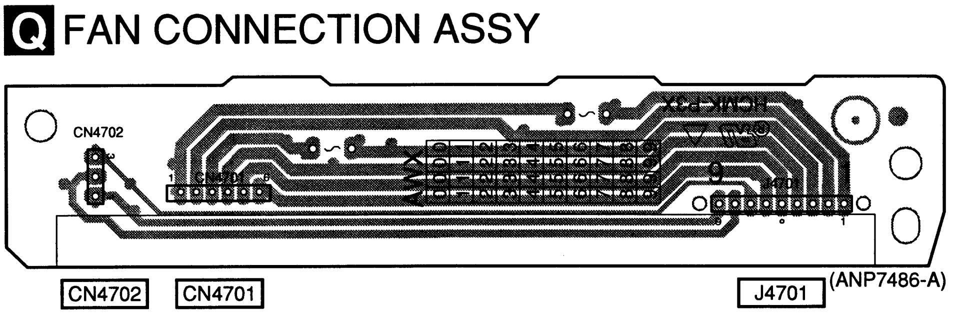

CN4001
CN4002
CN4003
CN4001
CN4002
CN4003
CN4004
CMK-P3X
☐ AWX
☐ AWX****
☐ AWX7982
POWER AMP IN ASSY
WARNING THIS PRODUCT CONTAINS LEAD IN SOLDER AND CERTAIN ELECTRICAL PARTS CONTAIN CHEMICALS WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. HEALTH & SAFETY CODE SECTION 25249.6 - PROPOSITION 65
4001
CN4004
(ANP7419-C)
4001
Q4001

4.11 FAN CONNECTION ASSY

SIDE A **SIDE A**


Q FAN CONNECTION ASSY
FAN MOTOR (REAR)
AF 2201
R CN4051
CN4702
CN4701
J4701
HCMK-P3X
CN4702
1.FAN+
2.FAN-
3.FANSTOP
1
3
1
6
CAUTION
REPLACE WITH SAME TYPE NO.491.200
FOR IC4701 AND IC4702 MFD.BY LITTELFUSE INC.
FAN CONNECTION ASS'Y
CN4701
1.-VH
2.VHG
3.+VH
4.REG B
5.REG G
6.REG B
IC4701
ATTENTION
EN CAS DE REMPLACEMENT DES FUSIBLES
IC4701 ET IC4702
N'UTILISER QUE LA REFERENCE
491.200,DE CHEZ LITTELFUSE INC.
IC4702
1.-VH
2.VHG
3.+VH
4.REG B
5.REG G
6.REG B
7.FANSTOP
8.FAN-
9.FAN+
6
J4701
1
IC4701
IC4702
(ANP7486-A)

SIDE B **SIDE B**


Q FAN CONNECTION ASSY
CN4702
CN4701
1
6
J4701
HCMK-P3X
CN4702
CN4701
J4701
(ANP7486-A)

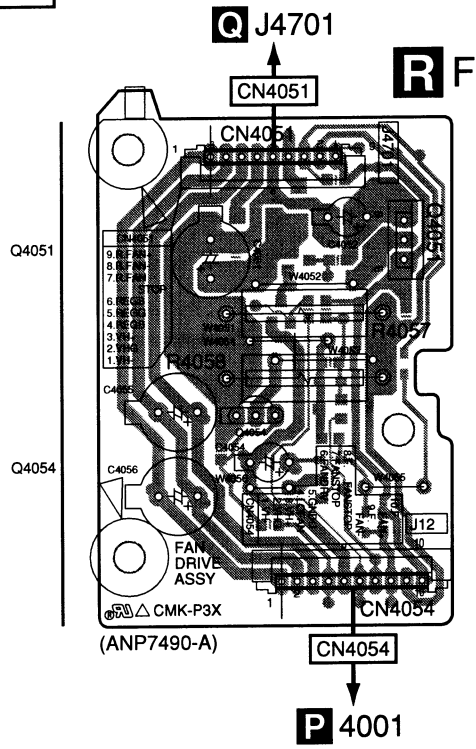
4.12 FAN DRIVE ASSY

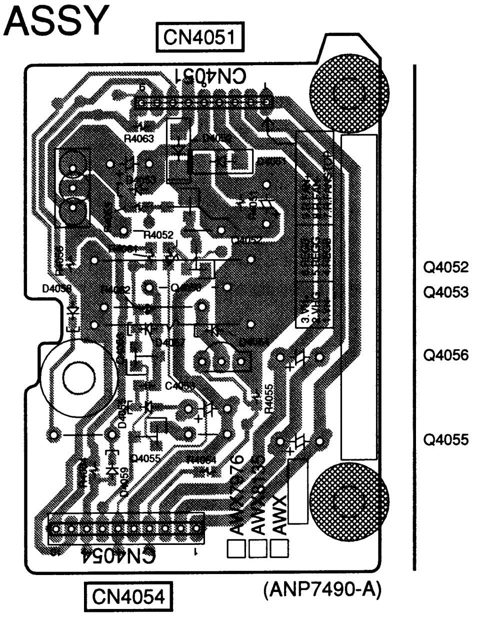
• For VSX-AX5i-S

SIDE A

SIDE B

R FAN DRIVE ASSY


Q J4701
CN4051
Q4051
Q4054
R4057
R4058
FAN DRIVE ASSY
CMK-P3X
CN4054
(ANP7490-A)
P 4001

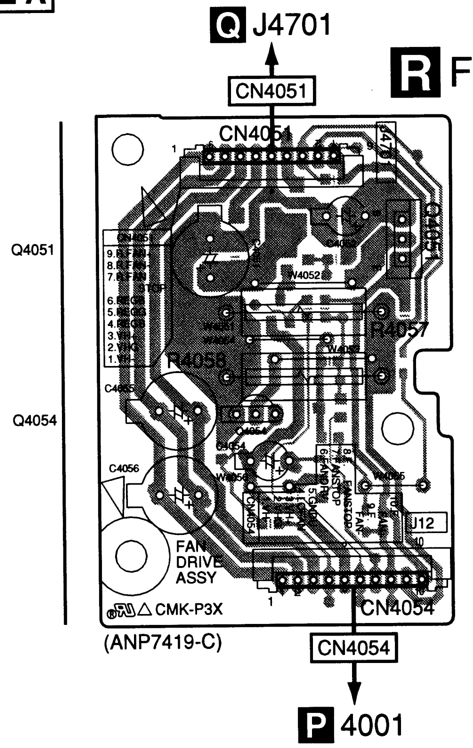

CN4051
Q4052
Q4053
Q4056
Q4055
AWX
CN4054
(ANP7490-A)

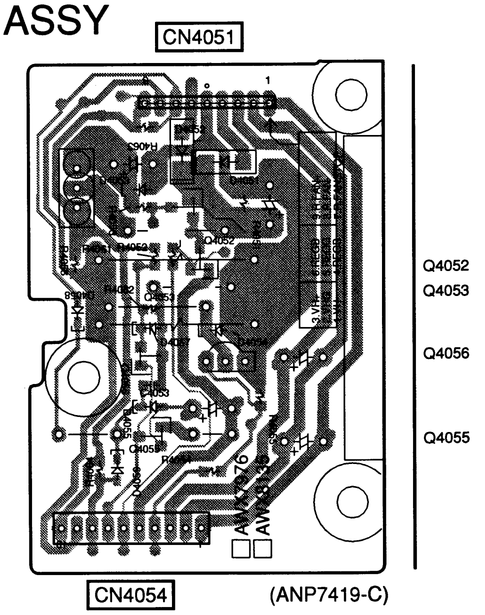
• For VSX-AX3-S, -K

SIDE A

SIDE B

R FAN DRIVE ASSY


Q J4701
CN4051
Q4051
Q4054
R4057
R4058
FAN DRIVE ASSY
CMK-P3X
CN4054
(ANP7419-C)
P 4001

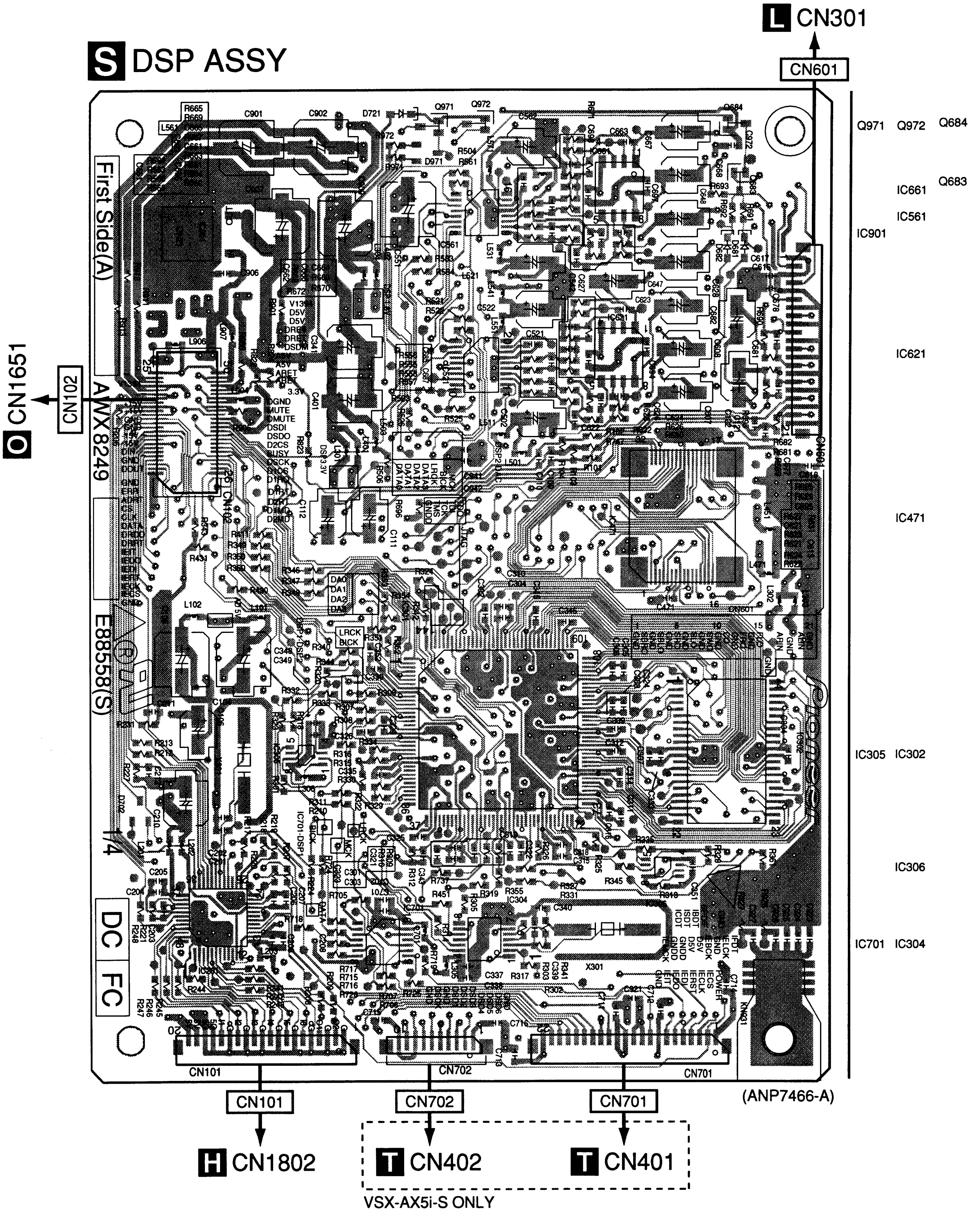

CN4051
Q4052
Q4053
Q4056
Q4055
CN4054
(ANP7419-C)

4.13 DSP ASSY

SIDE A

SIDE A

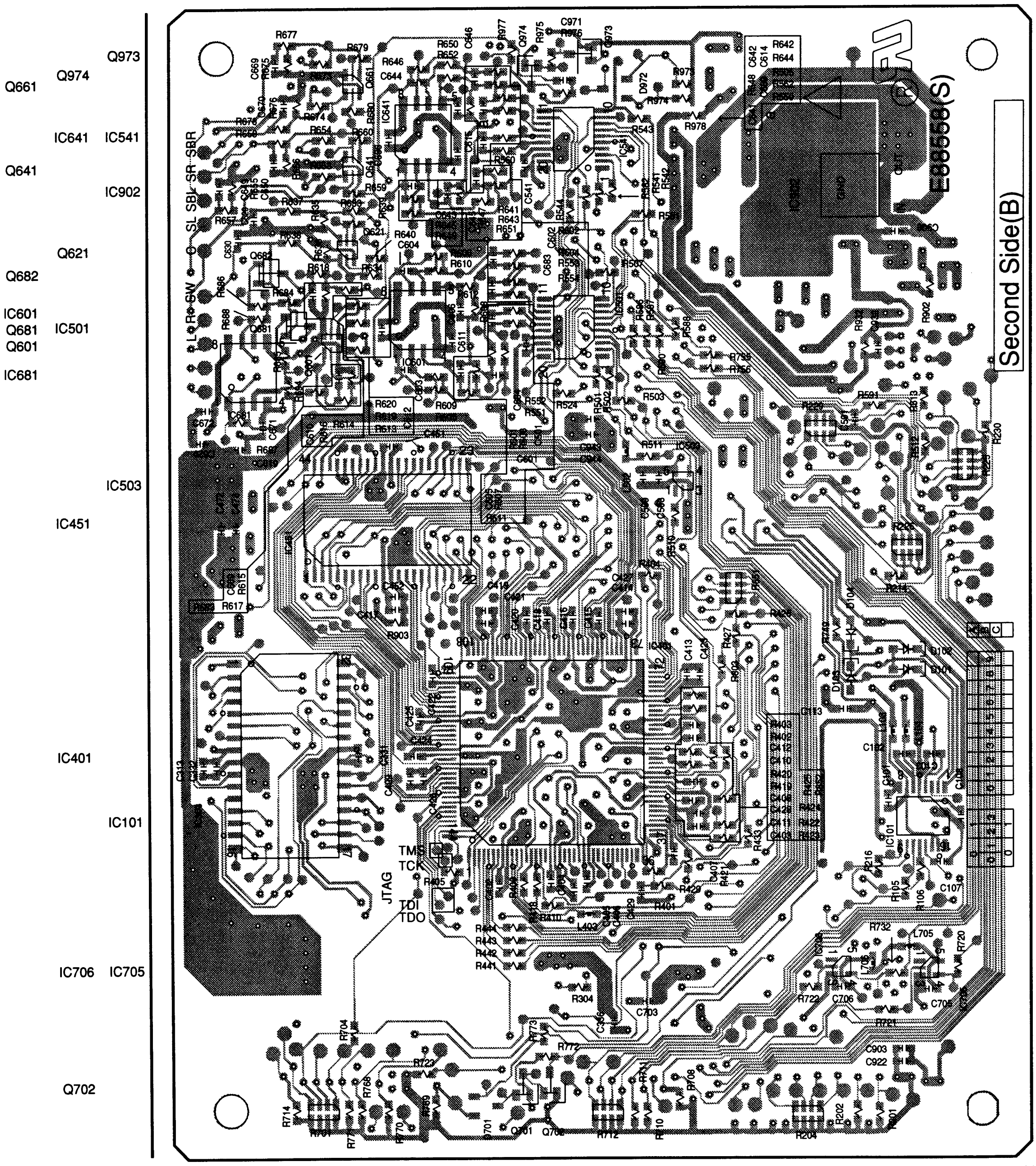
- This diagram has four layers.
  In the two middle layers, mainy Vcc and GND are connected.


L CN301
S DSP ASSY
CN601
Q971 Q972 Q684
IC661 Q683
IC561
IC901
IC621
IC471
IC305 IC302
IC306
IC701 IC304
O CN1651
CN102
First Side(A)
ANX 8249
E8558(S)
1/4
DC
FC
CN101
CN702
CN701
(ANP7466-A)
CN101
CN702
CN701
H CN1802
T CN402
T CN401
VSX-AX5i-S ONLY

SIDE B **SIDE B**

- This diagram has four layers.
  In the two middle layers, mainy Vcc and GND are connected.

S DSP ASSY

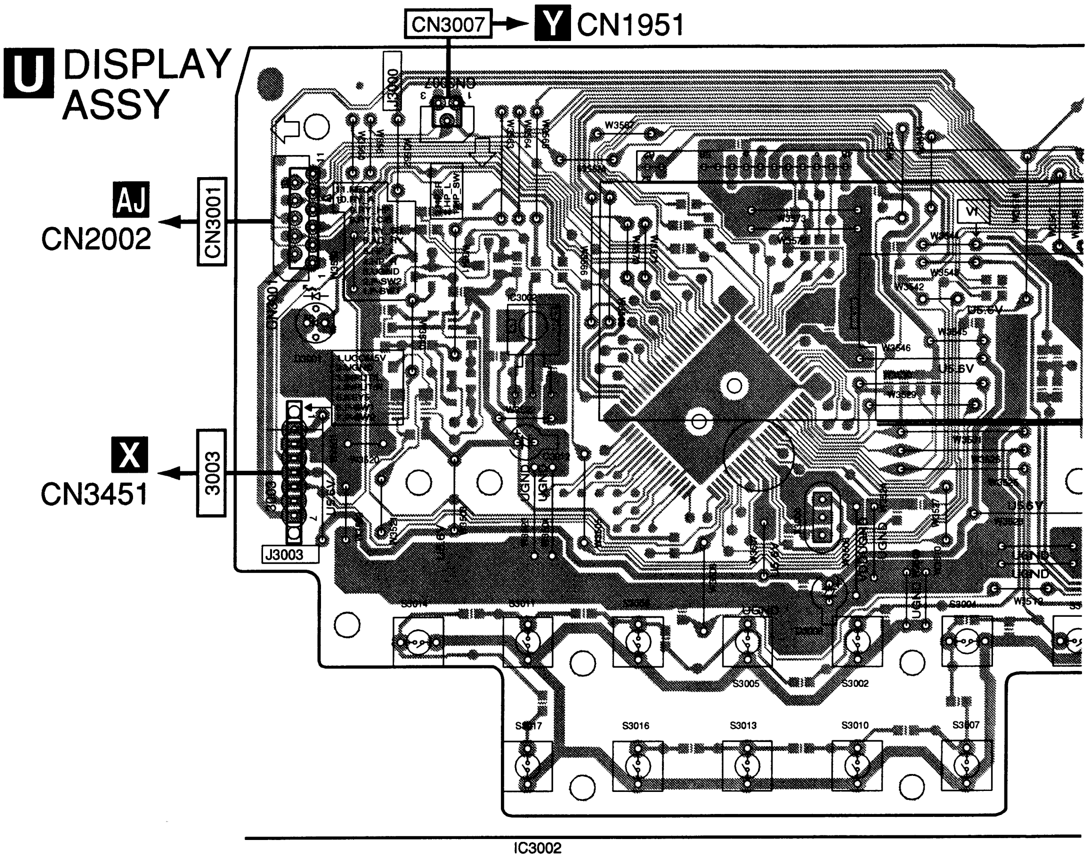

Q973
Q974
Q661
IC641
IC541
Q641
IC902
Q621
Q682
IC601
Q681
Q601
IC681
IC501
IC503
IC451
IC401
IC101
IC706
IC705
Q702
Second Side(B)
JTAG
TMS
TCK
TDI
TDO
L+R+SW
SL SBL SR SBR

(ANP7466-A)

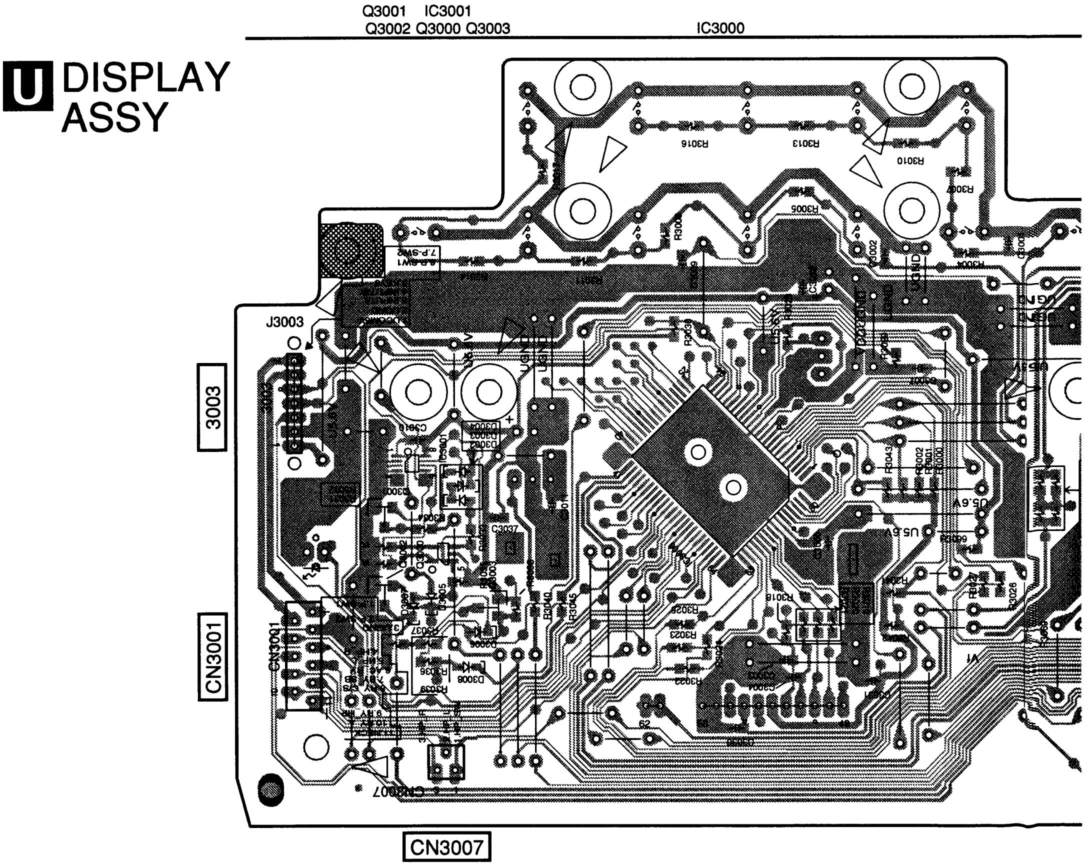
4.14 DISPLAY ASSY

- **For VSX-AX5i-S**

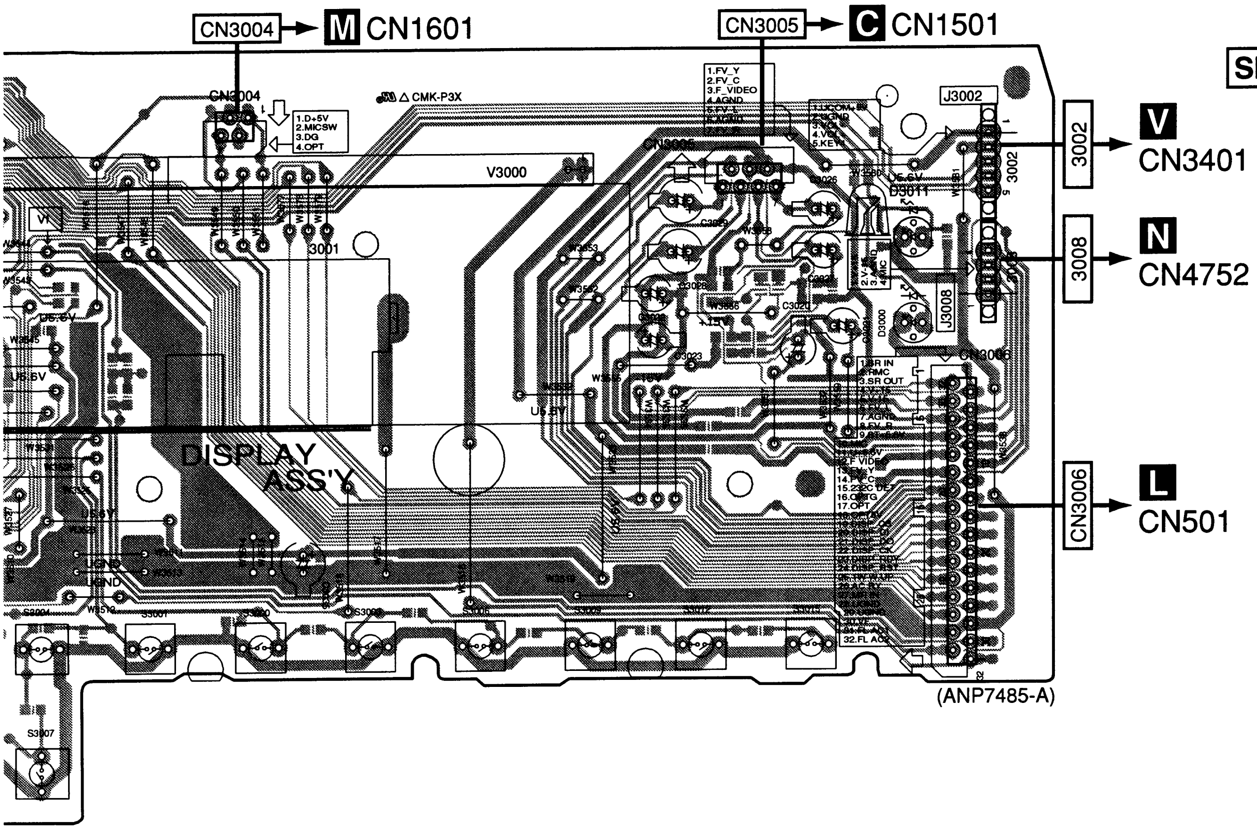
SIDE A


U DISPLAY ASSY
CN3007 → Y CN1951
AJ CN2002 ← CN3001
X CN3451 ← 3003
J3003
S3014
S3011
S3008
S3005
S3002
S3004
S3017
S3016
S3013
S3010
S3007
IC3002

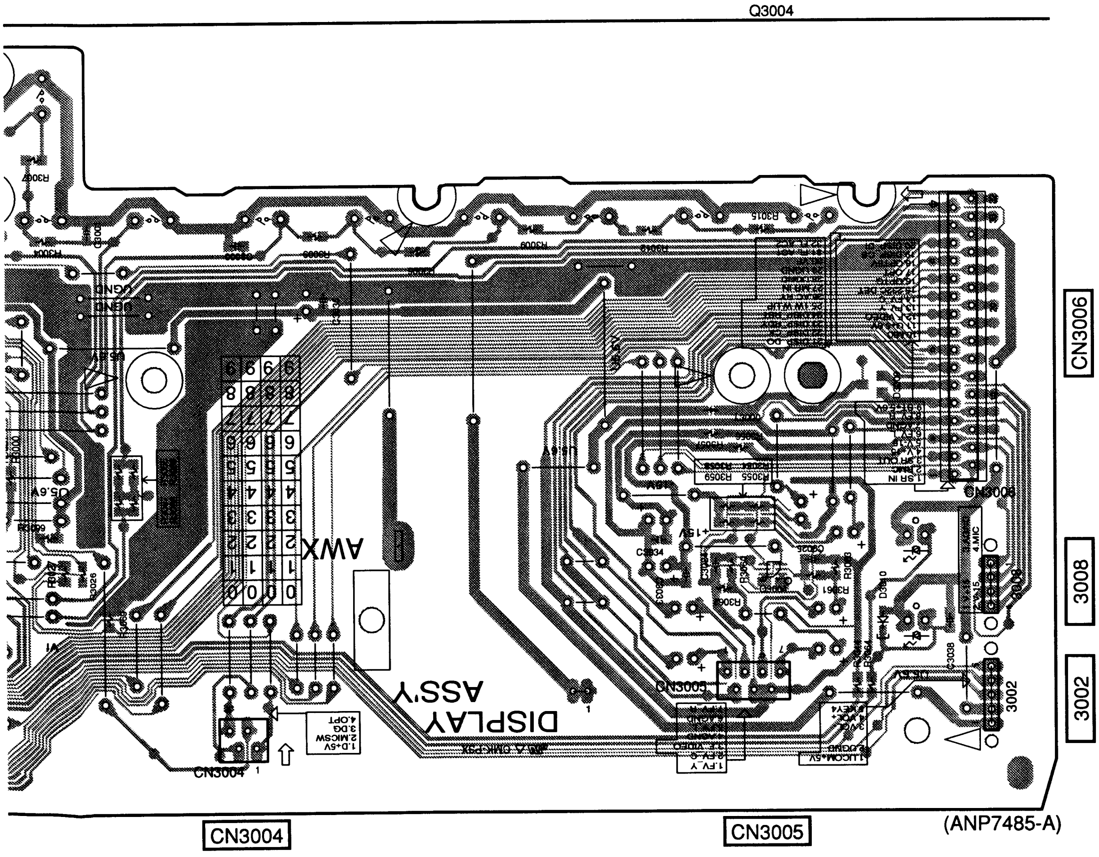
SIDE B


Q3001 IC3001
Q3002 Q3000 Q3003
IC3000
U DISPLAY ASSY
J3003
3003
CN3001
R3016
R3013
R3010
R3005
U5.6V
CN3007

SIDE A


CN3004
M CN1601
CN3005
C CN1501
CN3004
1.D+5V
2.MICSW
3.DG
4.OPT
CMK-P3X
1.FV_Y
2.FV_C
3.F_VIDEO
4.AGND
V3000
J3002
3002
V CN3401
3008
N CN4752
J3008
CN3006
L CN501
1.SR IN
2.RMC
3.SR OUT
17.OPT
32.FL AC2
DISPLAY ASS'Y
U5.6V
UGND
S3001
S3007
(ANP7485-A)

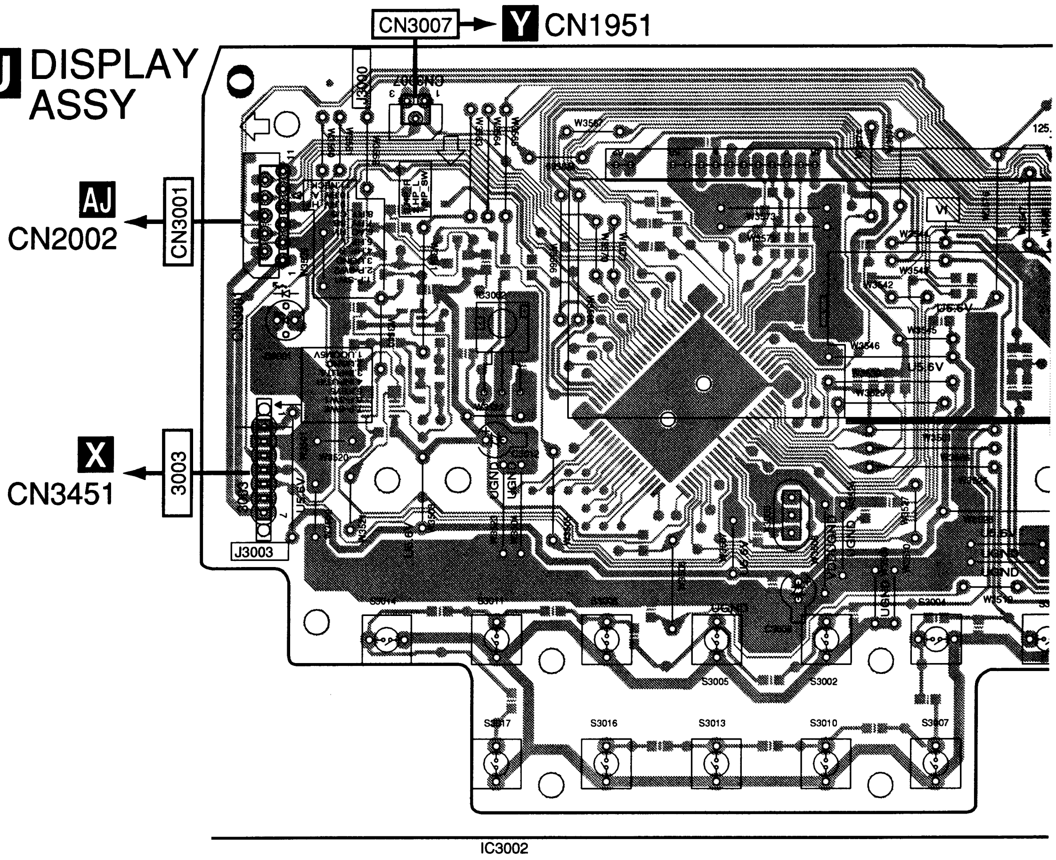
SIDE B


Q3004
CN3006
CN3008
3008
3002
CN3005
CN3004
1.D+5V
2.MICSW
3.DG
4.OPT
DISPLAY ASS'Y
AWX
CN3004
CN3005
(ANP7485-A)

• For VSX-AX3-S, -K

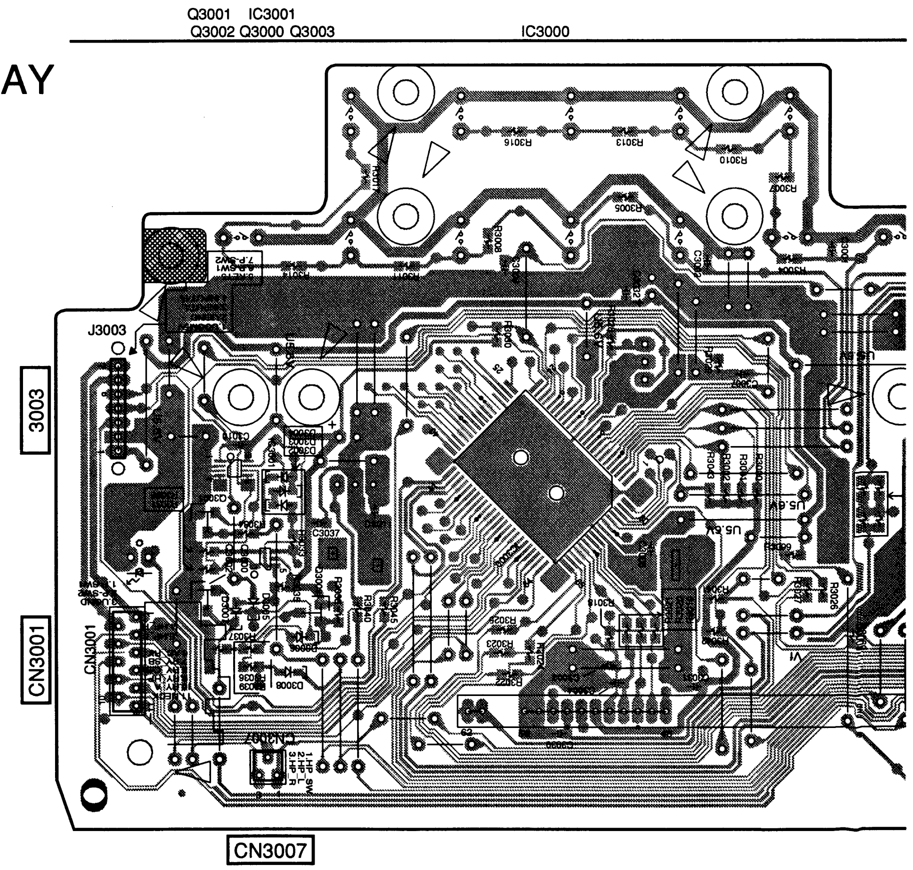
SIDE A

U DISPLAY ASSY

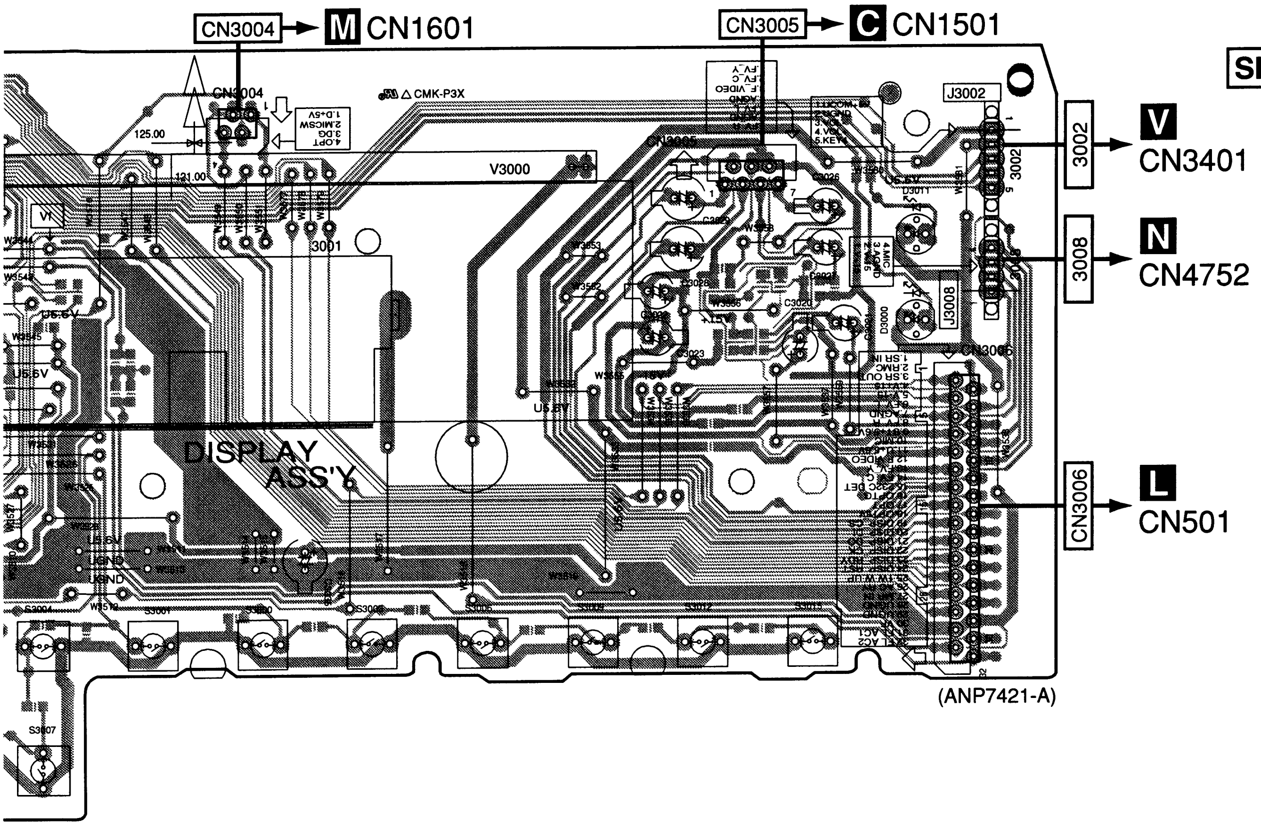

CN3007
Y CN1951
AJ
CN2002
CN3001
X
CN3451
3003
J3003
S3014
S3011
S3005
S3002
S3004
S3017
S3016
S3013
S3010
S3007
U5.6V
W3546
W3545
W3548
IC3002

SIDE B

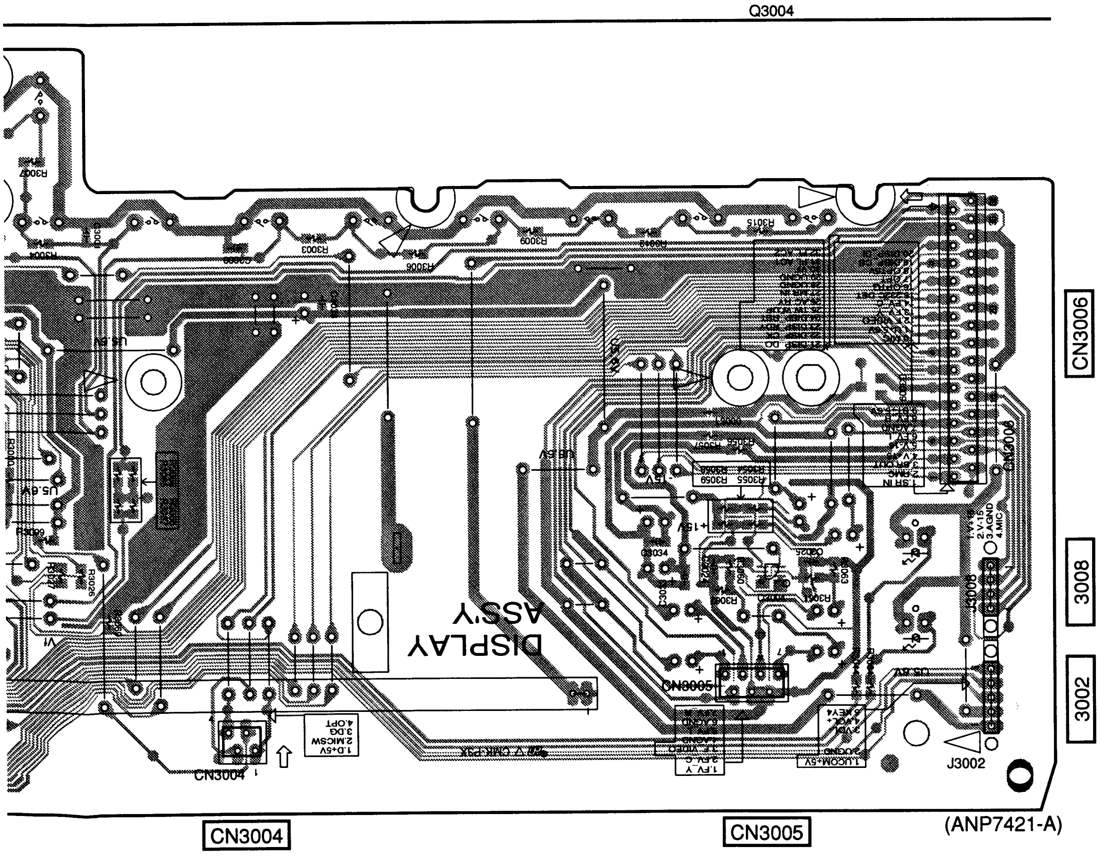
U DISPLAY ASSY


Q3001 IC3001
Q3002 Q3000 Q3003
IC3000
J3003
3003
CN3001
R3016
R3013
R3010
R3007
R3005
U5.6V
CN3007

SIDE A


CN3004
M CN1601
CN3005
C CN1501
3002
V CN3401
3008
N CN4752
CN3006
L CN501
CMK-P3X
V3000
J3002
J3008
DISPLAY ASS'Y
(ANP7421-A)

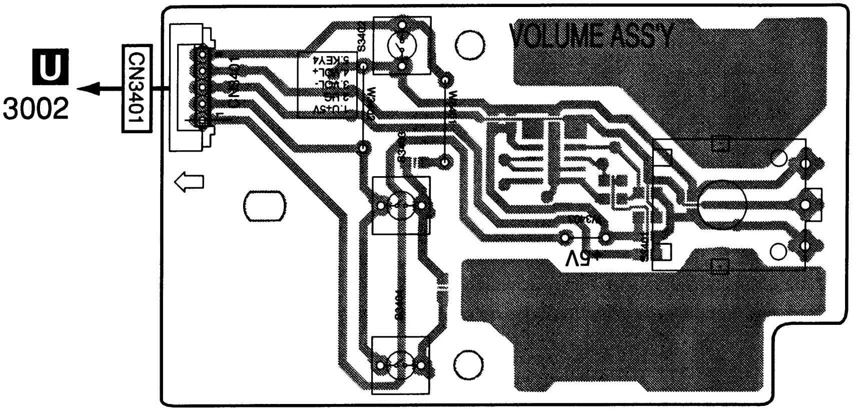
SIDE B


Q3004
CN3006
3008
3002
J3002
CN3005
CN3004
DISPLAY ASS'Y
(ANP7421-A)

4.15 VOLUME, MECHA SW, MULTI JOG and HEADPHONE ASSYS

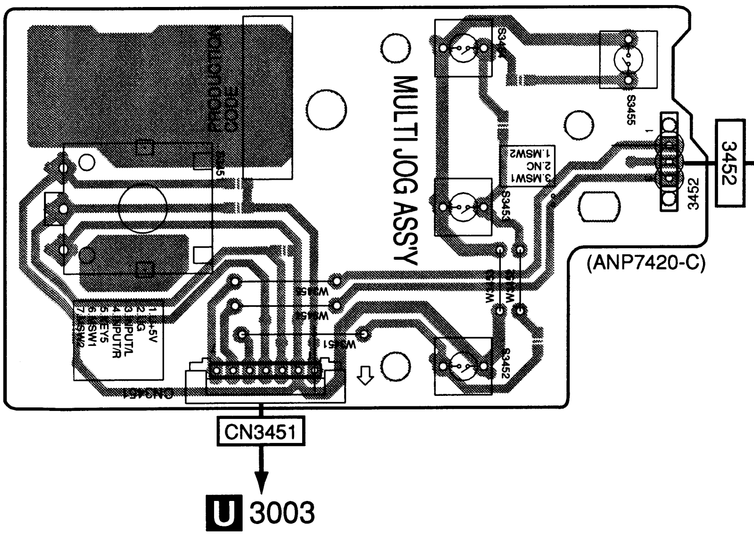
SIDE A **SIDE A**

V VOLUME ASSY


U
3002
CN3401
VOLUME ASSY
1.+5V
2.KEY3
3.VOL-
4.VOL+
5.KEY4
S3401
+5V

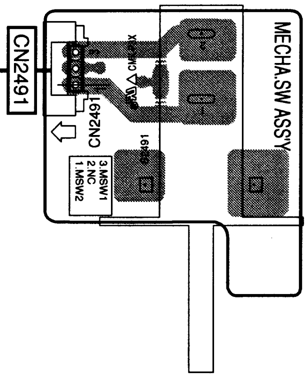
(ANP7420-C)

X MULTI JOG ASSY


PRODUCTION CODE
MULTI JOG ASS'Y
S3454
S3455
S3451
S3452
1.MSW2
2.NC
3.MSW1
3452
1.+5V
2.G
3.INPUTL
4.INPUTR
5.KEY5
6.MSW1
7.MSW2
CN3451
U 3003

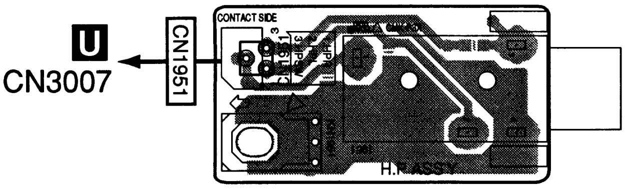
(ANP7420-C)

W MECHA SW ASSY


CN2491
MECHA.SW ASS'Y
3.MSW1
2.NC
1.MSW2

(ANP7420-C)

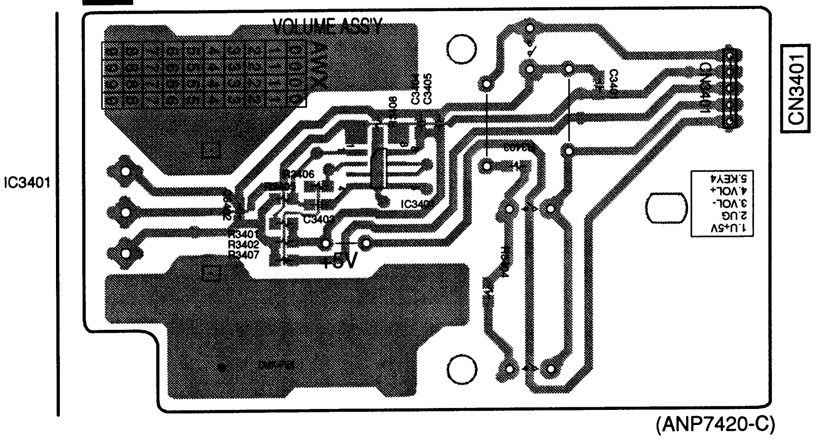
Y HEADPHONE ASSY


U
CN3007
CN1951
CONTACT SIDE
H.P. ASS'Y

(ANP7420-C)

SIDE B **SIDE B**

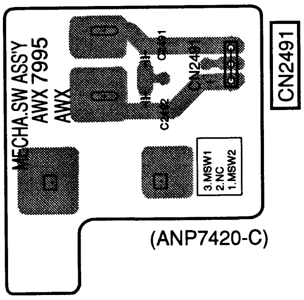
V VOLUME ASSY


IC3401
VOLUME ASS'Y
AWX
C3404
C3405
C3408
C3403
R3406
C3402
IC3402
R3401
R3402
R3407
+5V
CN3401
1.U+5V
2.UG
3.VOL-
4.VOL+
5.KEY4

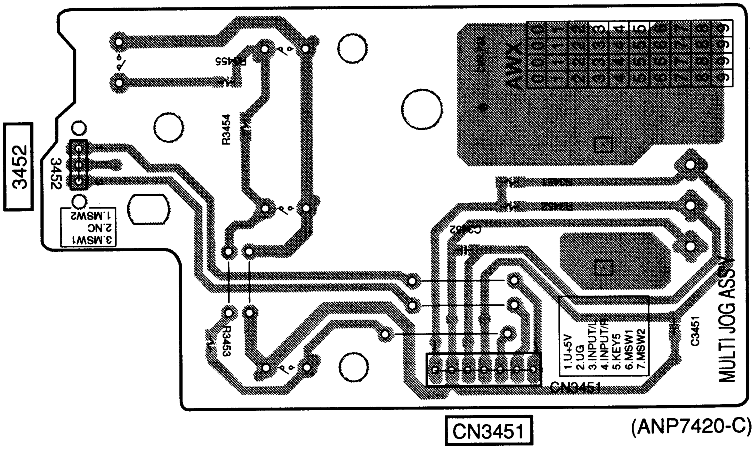
(ANP7420-C)

X MULTI JOG ASSY

W MECHA SW ASSY

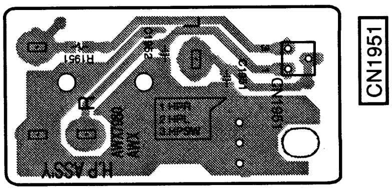

MECHA.SW ASS'Y
AWX 7995
AWX
C2491
C2492
CN2491
3.MSW1
2.NC
1.MSW2

(ANP7420-C)


3452
3.MSW1
2.NC
1.MSW2
R3455
R3454
R3453
C3452
R3451
R3452
AWX
1.U+5V
2.UG
3.INPUT/L
4.INPUT/R
5.KEY5
6.MSW1
7.MSW2
C3451
MULTI JOG ASSY
CN3451

(ANP7420-C)

Y HEADPHONE ASSY

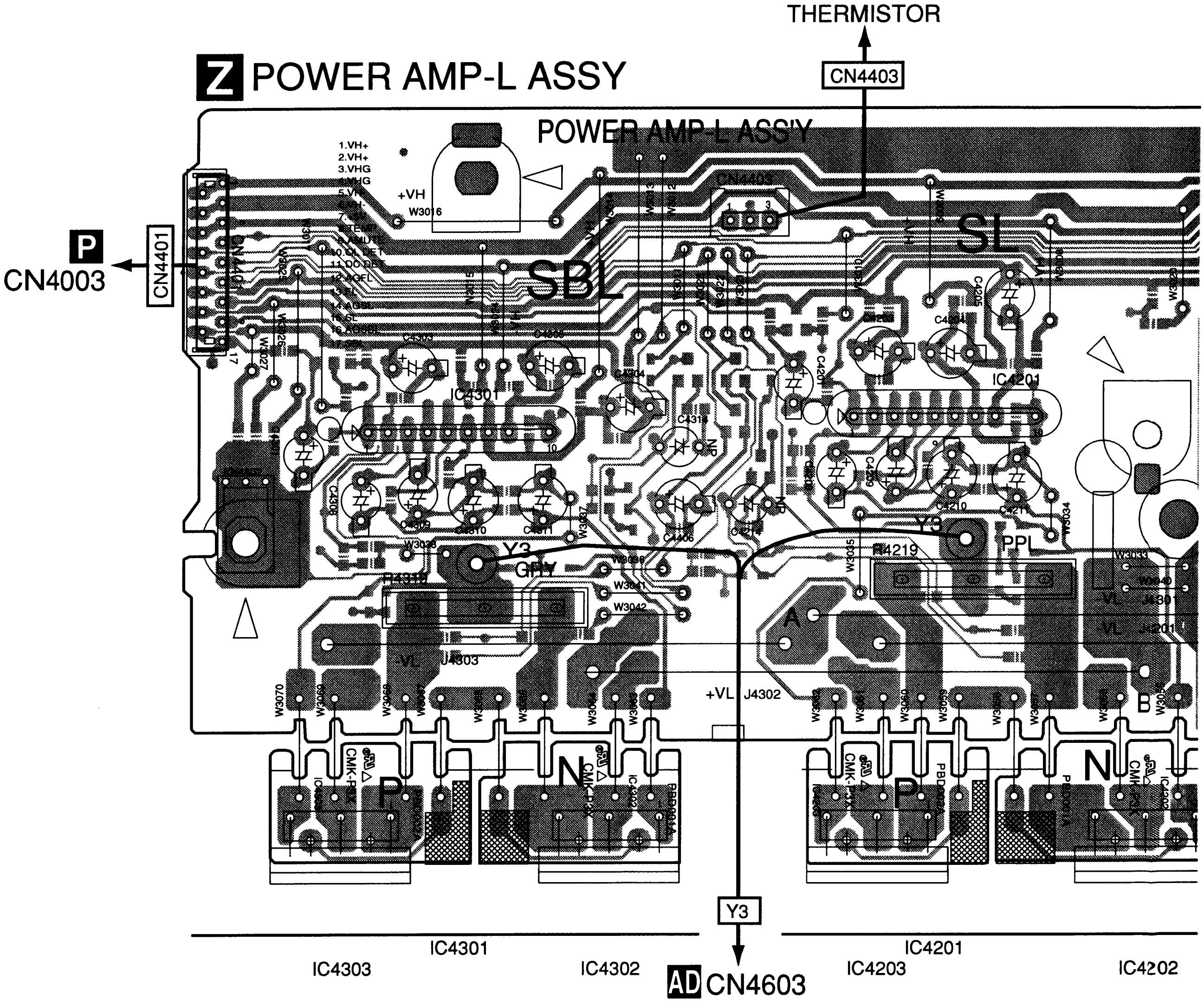

R1951
CN1951
H.P ASS'Y
AWX

(ANP7420-C)

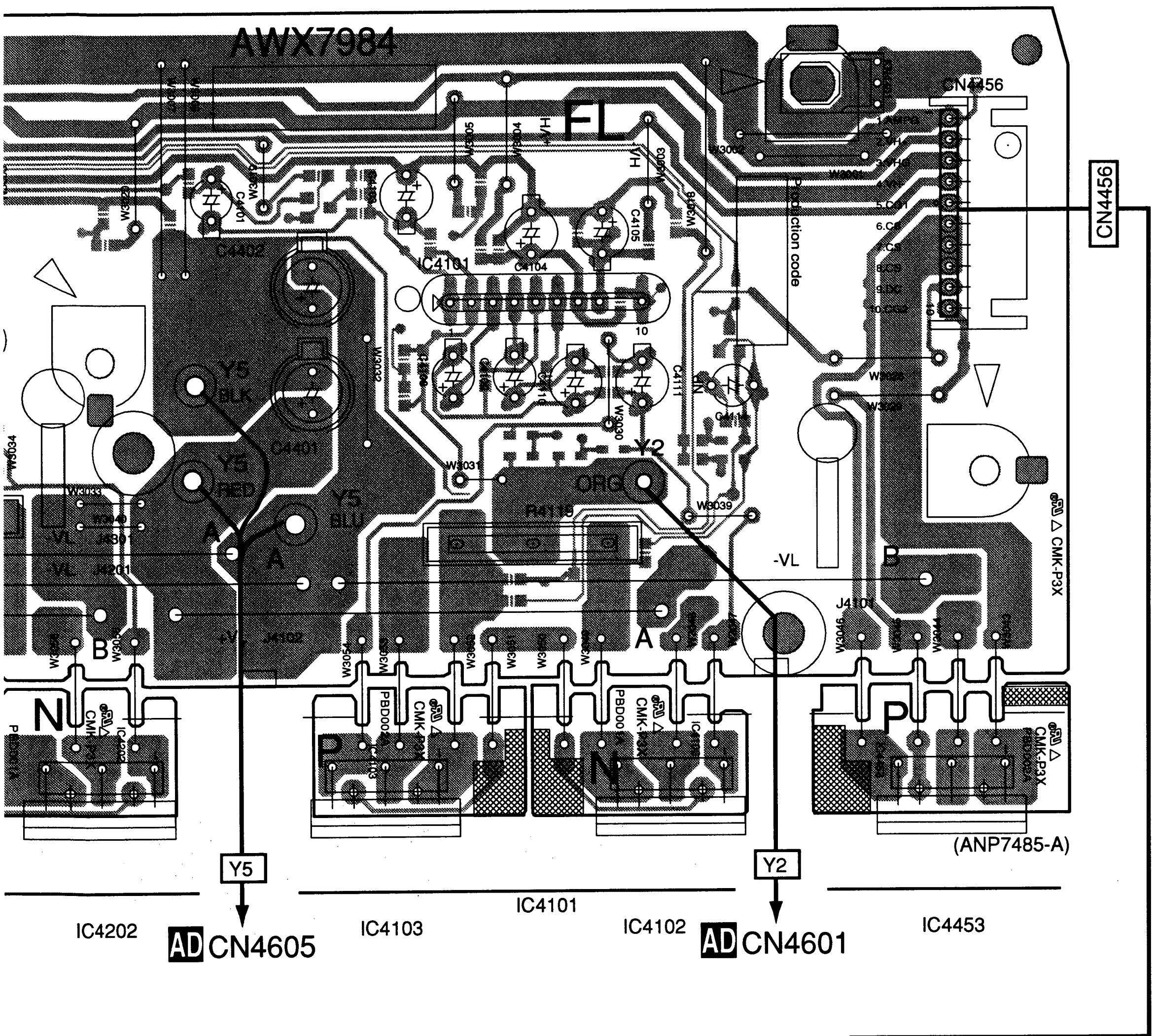
4.16 POWER AMP L and POWER AMP C ASSYS

SIDE A

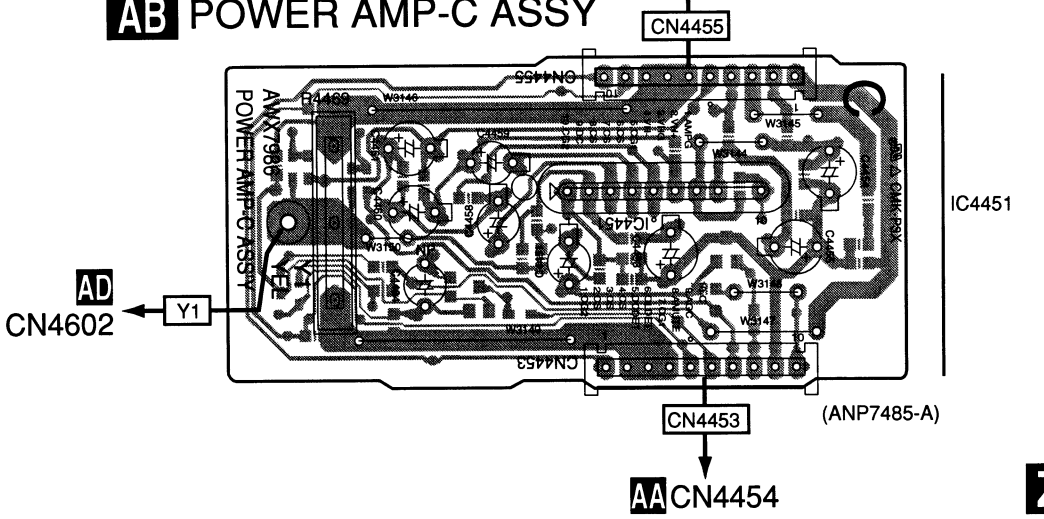
- **For VSX-AX5i-S**


THERMISTOR
CN4403
Z POWER AMP-L ASSY
POWER AMP-L ASS'Y
P
CN4003
CN4401
1.VH+
2.VH+
3.VHG
+VH
W3016
SBL
SL
IC4301
IC4201
Y3
GRY
PPL
R4319
R4219
-VL
J4303
+VL
J4302
J4301
J4201
A
B
P
N
P
N
Y3
IC4303
IC4301
IC4302
IC4203
IC4201
IC4202
AD CN4603

SIDE A


AWX7984
FL
CN4456
IC4101
C4402
C4401
C4104
C4105
C4111
Production code
Y5 BLK
Y5 RED
Y5 BLU
Y2 ORG
R4115
-VL
+VL
J4102
J4101
J4301
J4201
A
B
N
P
CMK-P3X
PBD004
(ANP7485-A)
Y5
Y2
IC4202
IC4103
IC4101
IC4102
IC4453
AD CN4605
AD CN4601

AB POWER AMP-C ASSY

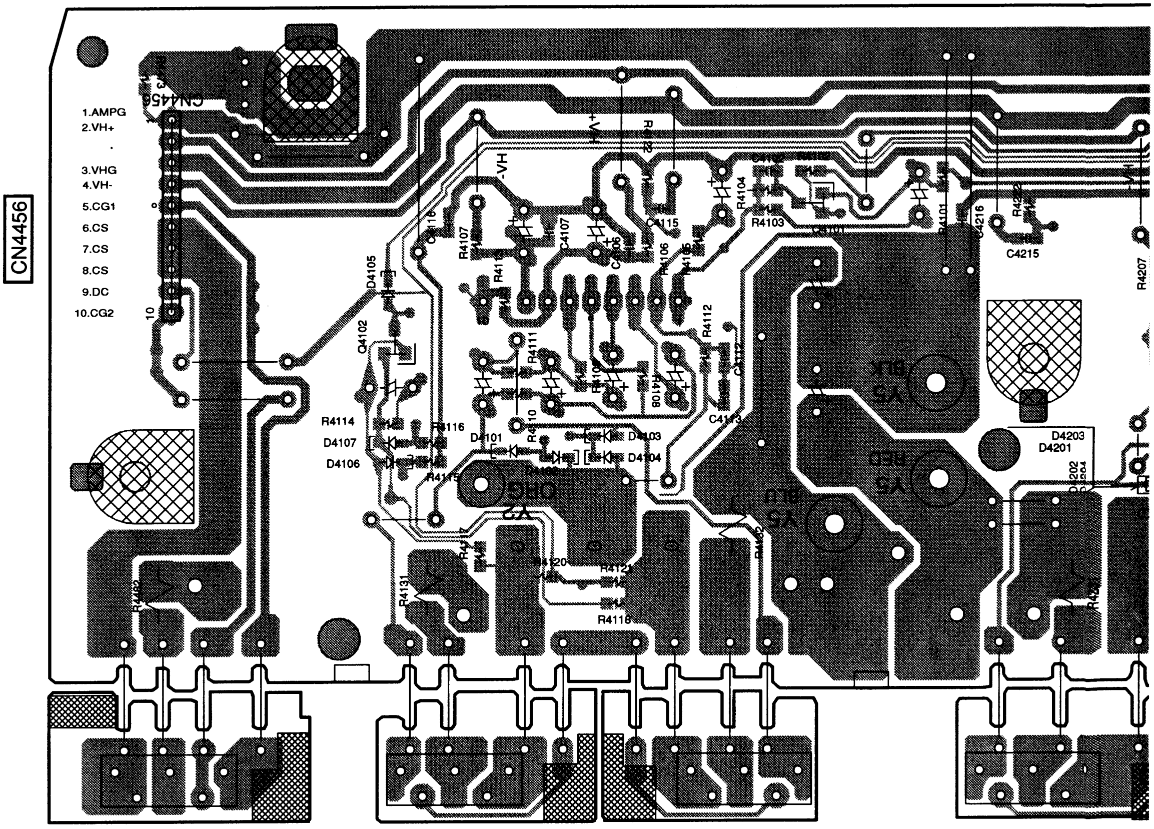

CN4455
AWX7986
POWER AMP-C ASSY
R4469
IC4451
CMK-P3X
CN4453
Y1
AD CN4602
(ANP7485-A)
AA CN4454

Z **AB**

SIDE B

• For VSX-AX5i-S

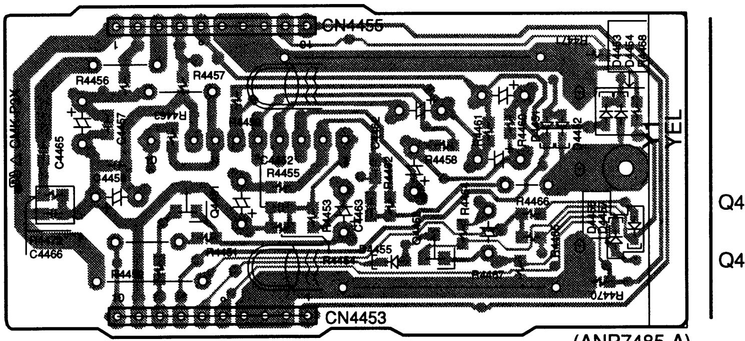
Z POWER AMP-L ASSY


CN4456
1.AMPG
2.VH+
3.VHG
4.VH-
5.CG1
6.CS
7.CS
8.CS
9.DC
10.CG2
R4114
D4107
D4106
R4116
R4115
D4101
D4103
D4104
D4105
Q4102
R4107
C4107
R4106
R4104
R4103
C4115
R4112
R4111
R4110
C4113
R4101
C4216
C4215
R4207
R4131
R4117
R4120
R4121
R4118
Y5 BLK
Y5 RED
Y5 BLU
Y5 ORG
D4203
D4201
-VH
+VH

Q4102 Q4101

AB POWER AMP-C ASSY

CN4455


CN4455
R4456
R4457
C4465
C4466
R4455
R4458
R4466
R4457
R4470
CN4453
YEL

Q4451

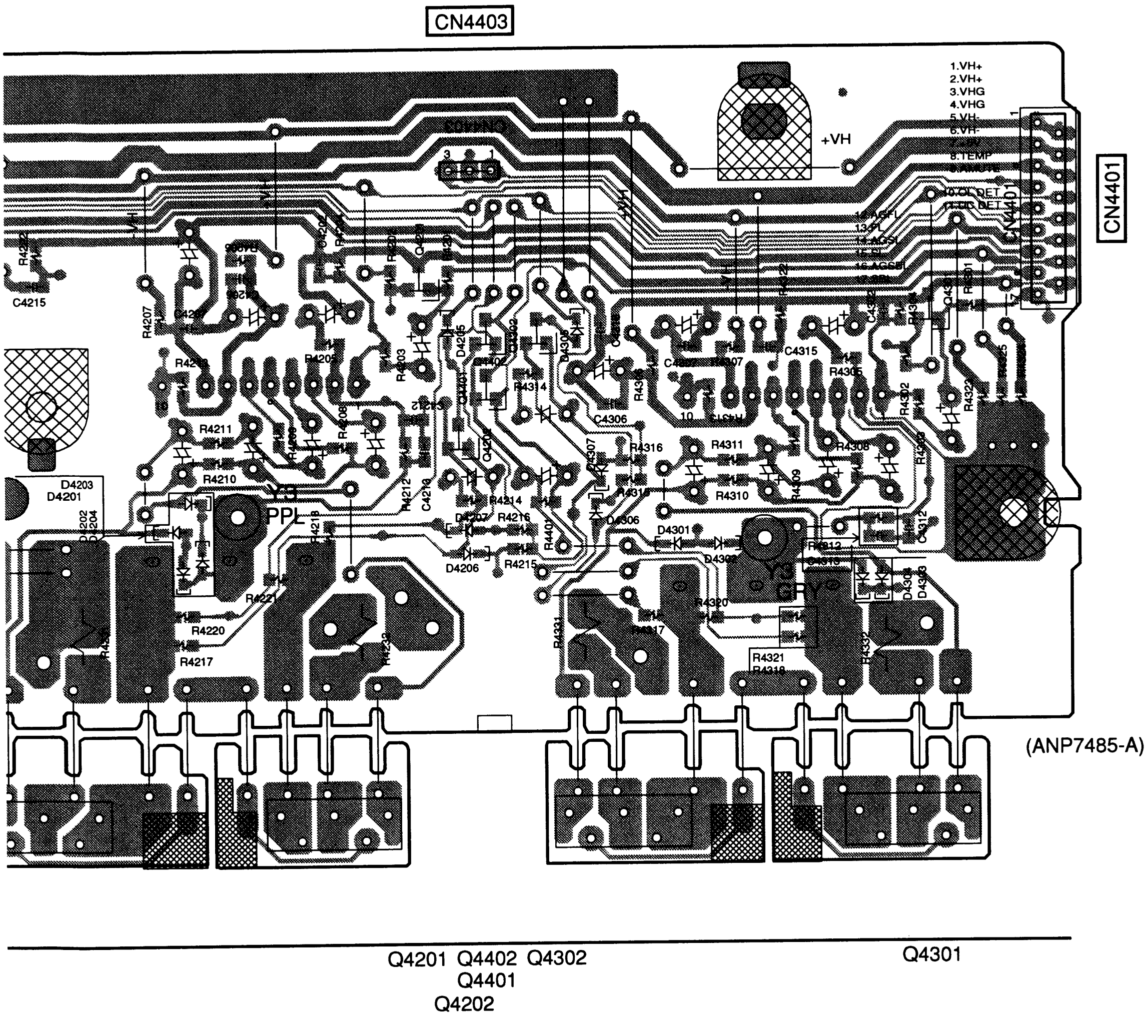
Q4452

(ANP7485-A)

CN4453

Z AB

SIDE B

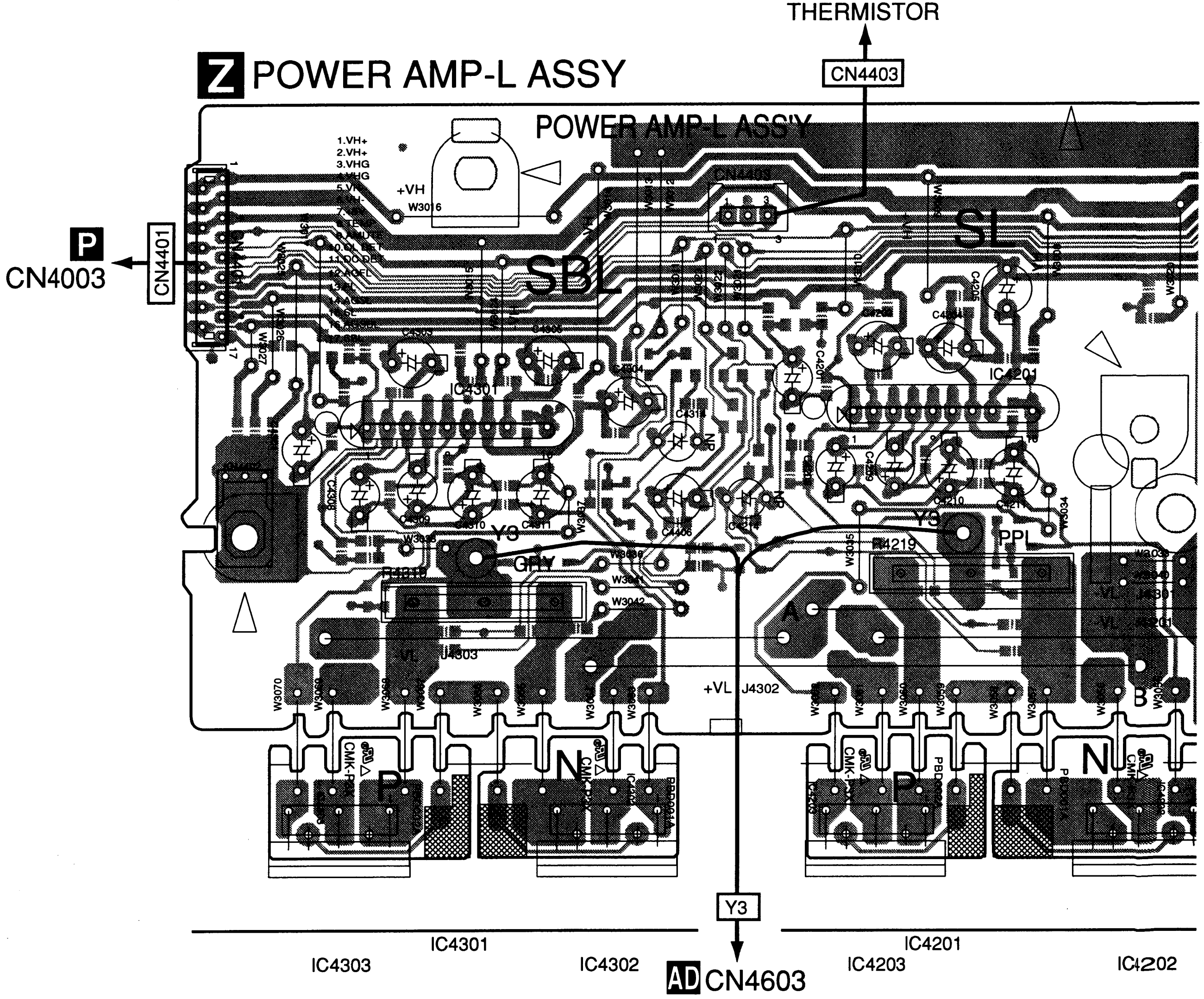

CN4403
CN4401
CN4401
1.VH+
2.VH+
3.VHG
4.VHG
5.VH-
6.VH-
8.TEMP
10.OL DET
+VH
VH
Y3
PPL
Y3
GRY
C4215
C4315
C4306
R4207
R4211
R4210
R4212
R4214
R4215
R4216
R4217
R4218
R4220
R4221
R4305
R4307
R4309
R4310
R4311
R4314
R4316
R4317
R4320
R4321
R4322
R4331
R4332
D4201
D4203
D4206
D4207
D4301
D4306
Q4201 Q4402 Q4302
Q4401
Q4202
Q4301
(ANP7485-A)

Z

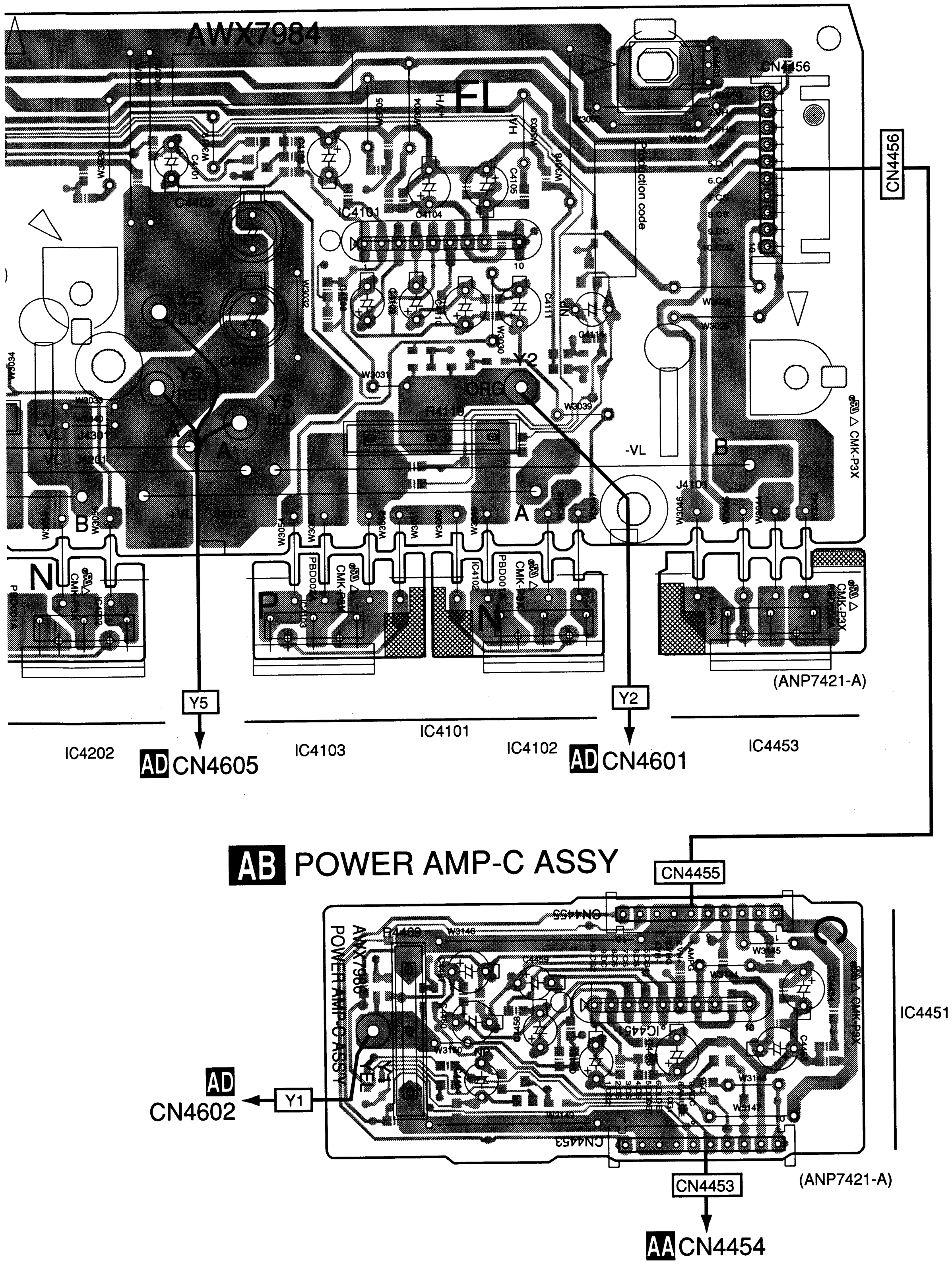
SIDE A

• For VSX-AX3-S, -K

Z POWER AMP-L ASSY


THERMISTOR
CN4403
P
CN4003
CN4401
POWER AMP-L ASS'Y
1.VH+
2.VH+
3.VHG
4.VHG
+VH
W3016
SBL
SL
IC4301
IC4201
C4308
C4309
C4310
C4311
C4312
C4304
C4406
C4205
C4204
C4210
C4211
R4319
R4219
Y3
GRY
PPL
W3036
W3041
W3042
W3070
W3034
W3035
-VL
J4303
+VL
J4302
J4301
J4201
A
B
P
N
CMK-P
Y3
AD CN4603
IC4303
IC4301
IC4302
IC4203
IC4201
IC4202

SIDE A

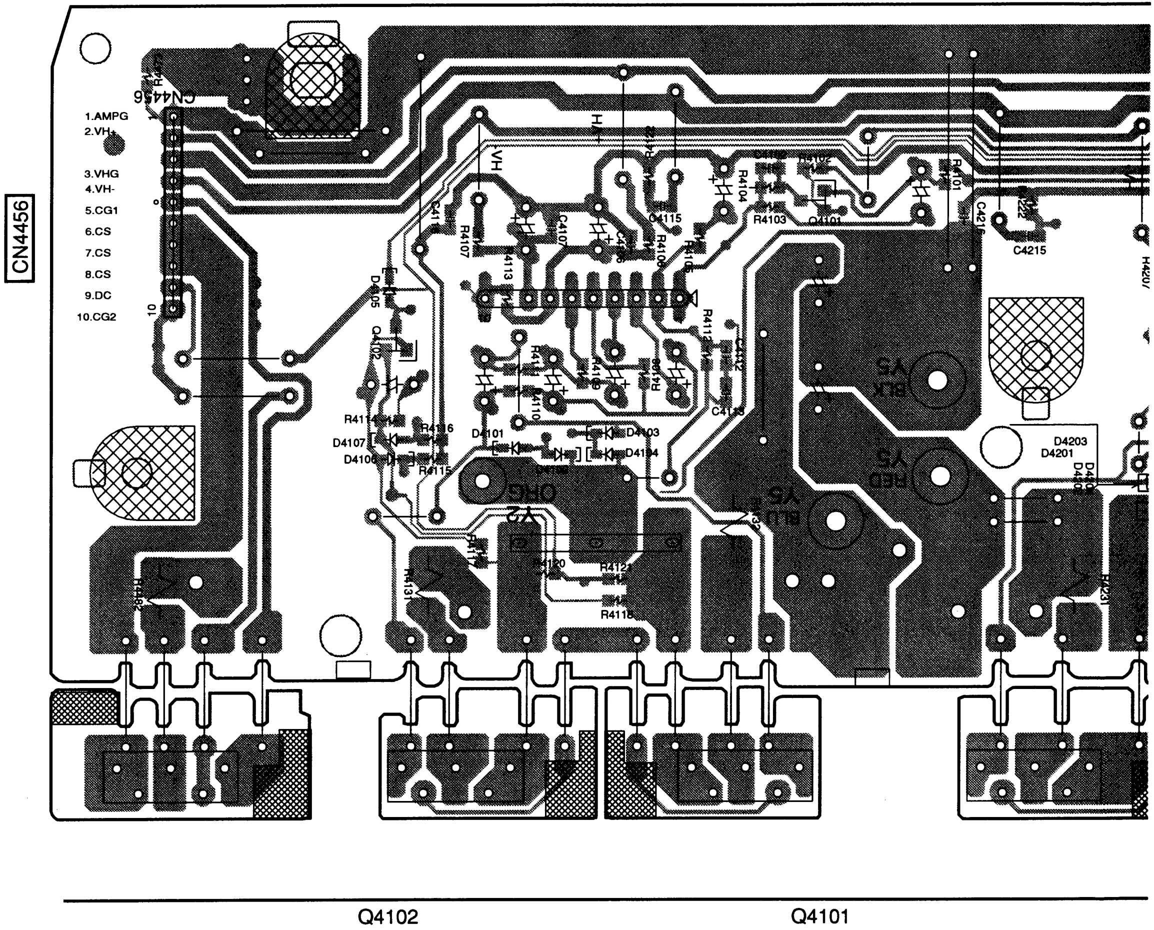

AWX7984
FL
CN4456
Protection code
IC4101
C4402
C4401
C4104
C4105
C4111
Y5 BLK
Y5 RED
Y5 BLU
ORG
Y2
R4110
-VL
+VL
J4301
J4201
J4102
J4101
A
B
N
P
PBD002A
CMK-P3X
IC4102
IC4103
W3031
W3039
W3034
W3054
(ANP7421-A)
Y5
Y2
IC4202
IC4103
IC4101
IC4102
IC4453
AD CN4605
AD CN4601
AB POWER AMP-C ASSY
CN4455
AWX7980
POWER AMP-C ASSY
R4469
W3146
W3145
W3144
W3143
W3140
IC4451
IC4453
YEL
Y1
AD CN4602
CN4453
(ANP7421-A)
AA CN4454

Z **AB**

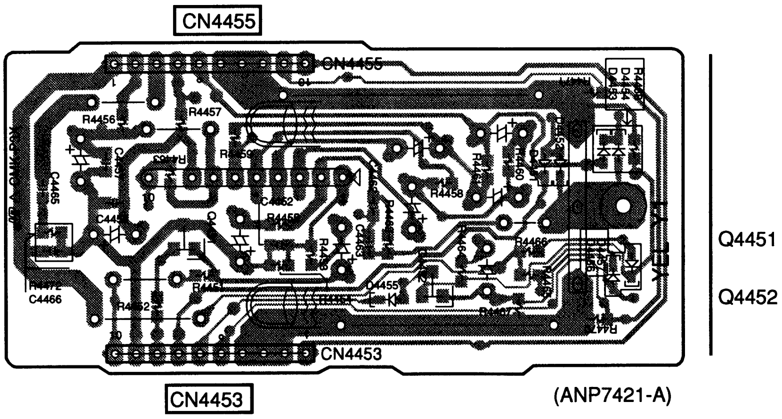
SIDE B

- **For VSX-AX3-S, -K**

Z POWER AMP-L ASSY


CN4456
1.AMPG
2.VH+
3.VHG
4.VH-
5.CG1
6.CS
7.CS
8.CS
9.DC
10.CG2
VH
D4105
Q4102
R4114
D4107
D4106
R4116
R4115
D4101
D4103
D4104
R4107
R4113
R4104
R4103
Q4101
R4101
C4215
R4120
R4121
R4118
D4203
D4201
BLK Y5
RED Y5
BLU Y5
ORG Y2
Q4102
Q4101

AB POWER AMP-C ASSY


CN4455
CN4455
R4456
R4457
C4465
R4458
C4452
D4455
R4466
C4466
R4462
R4467
CN4453
CN4453
Q4451
Q4452

(ANP7421-A)

SIDE B

A

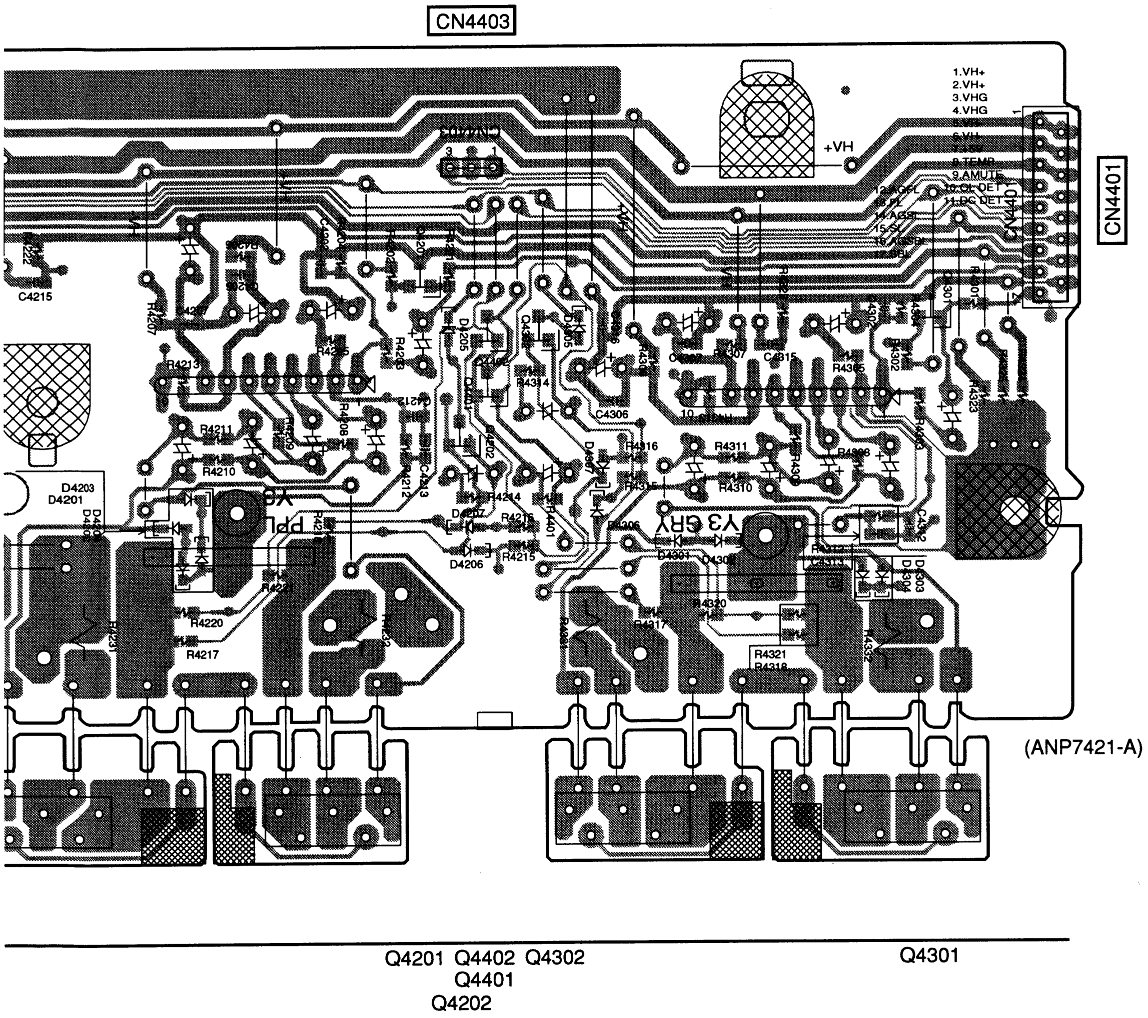
B

C

D

E

F


CN4403
CN4401
1.VH+
2.VH+
3.VHG
4.VHG
6.VH-
8.TEMP
9.AMUTE
10.OL DET
11.DC DET
12.AGFL
14.AGSL
15.SL
17.SBL
+VH
C4215
R4207
R4213
R4211
R4210
R4205
R4203
R4208
C4212
C4213
D4205
D4203
D4201
D4207
D4206
R4214
R4215
R4401
Q4202
R4314
D4305
C4306
R4316
R4315
R4311
R4310
R4307
C4315
R4305
R4306
R4308
D4302
R4323
C4302
D4301
Q4302
R4320
R4317
R4321
R4318
D4303
D4304
R4220
R4217
R4221
R4231
R4232
R4331
R4332
PPL
Y3 GRY
(ANP7421-A)
Q4201 Q4402 Q4302
Q4401
Q4202
Q4301

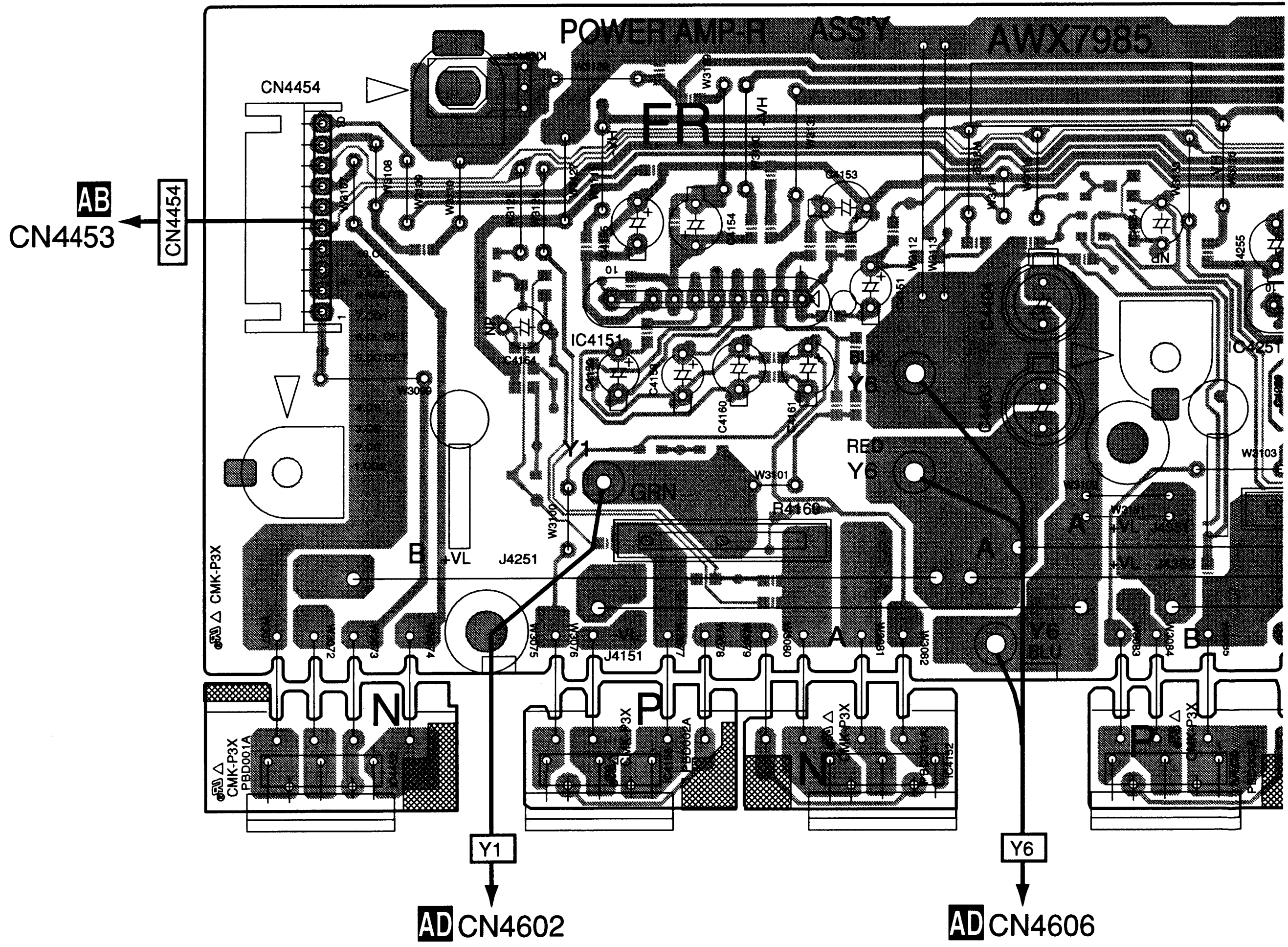
Z

4.17 POWER AMP R ASSY

SIDE A

- **For VSX-AX5i-S**

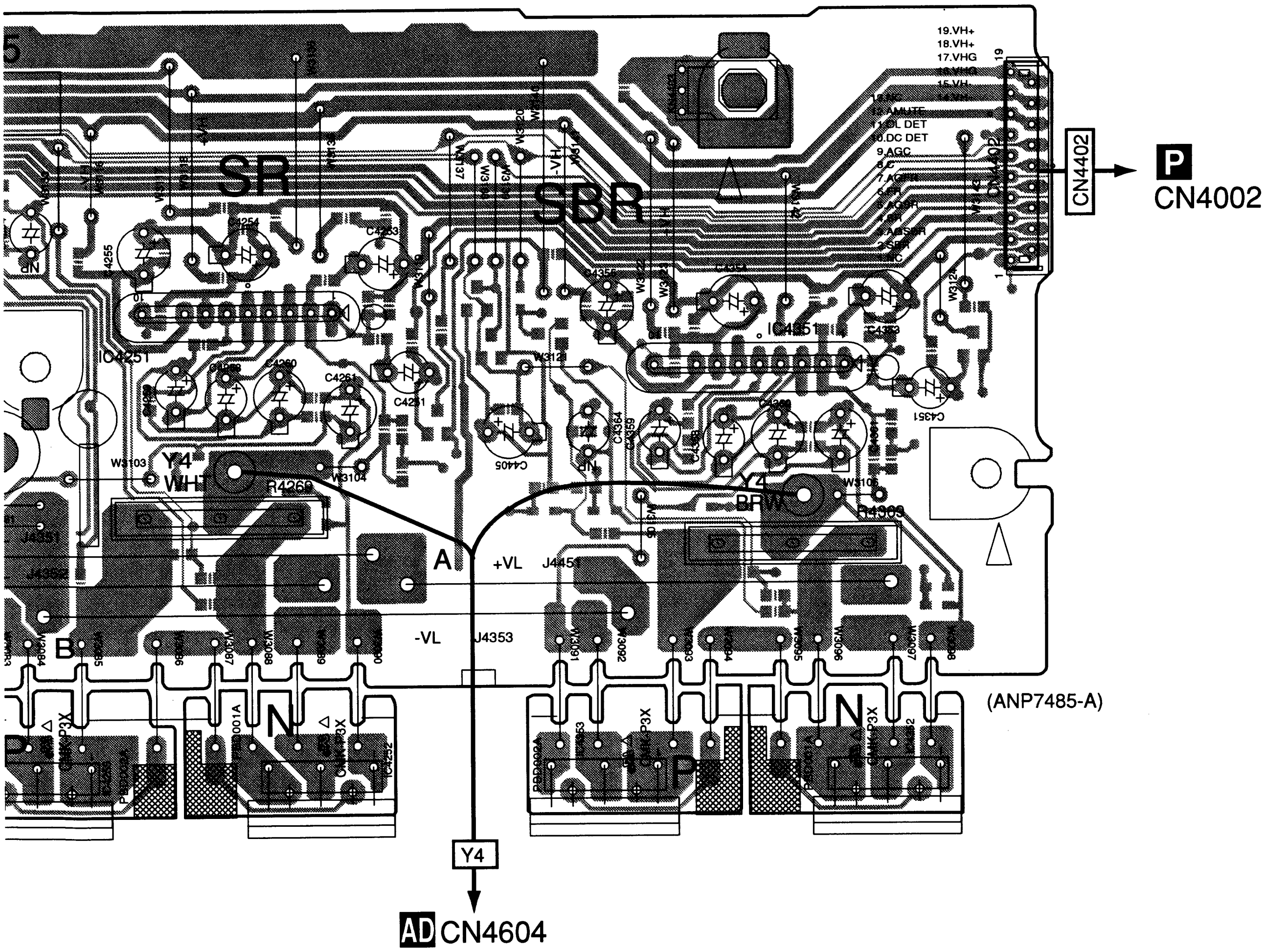
AA POWER AMP-R ASSY


POWER AMP-R ASS'Y
AWX7985
FR
CN4454
AB CN4453
CN4454
IC4151
C4153
C4154
C4160
C4161
W3101
W3102
W3103
W3100
R4169
J4251
J4151
J4351
J4352
IC4251
BLK
Y6
RED
Y6
GRN
Y1
Y6
BLU
A
B
+VL
-VL
N
P
CMK-P3X
PBD001A
PBD002A
Y1
Y6
AD CN4602
AD CN4606

IC4151

IC4452 IC4153 IC4152 IC4253

SIDE A


19.VH+
18.VH+
17.VHG
15.VH-
14.MUTE
11.OL DET
10.DC DET
9.AGC
7.AC
SR
SBR
-VH
IC4251
IC4351
C4254
C4253
C4260
C4261
C4251
C4405
C4364
C4351
C4353
W3103
W3104
W3106
Y4
WHT
R4260
Y4
BRW
R4360
J4351
J4352
J4451
J4353
A
B
+VL
-VL
N
P
N
P
CN4402
P
CN4002
Y4
AD
CN4604
(ANP7485-A)

IC4251
IC4253 IC4252 IC4353 IC4351 IC4352

A

SIDE B

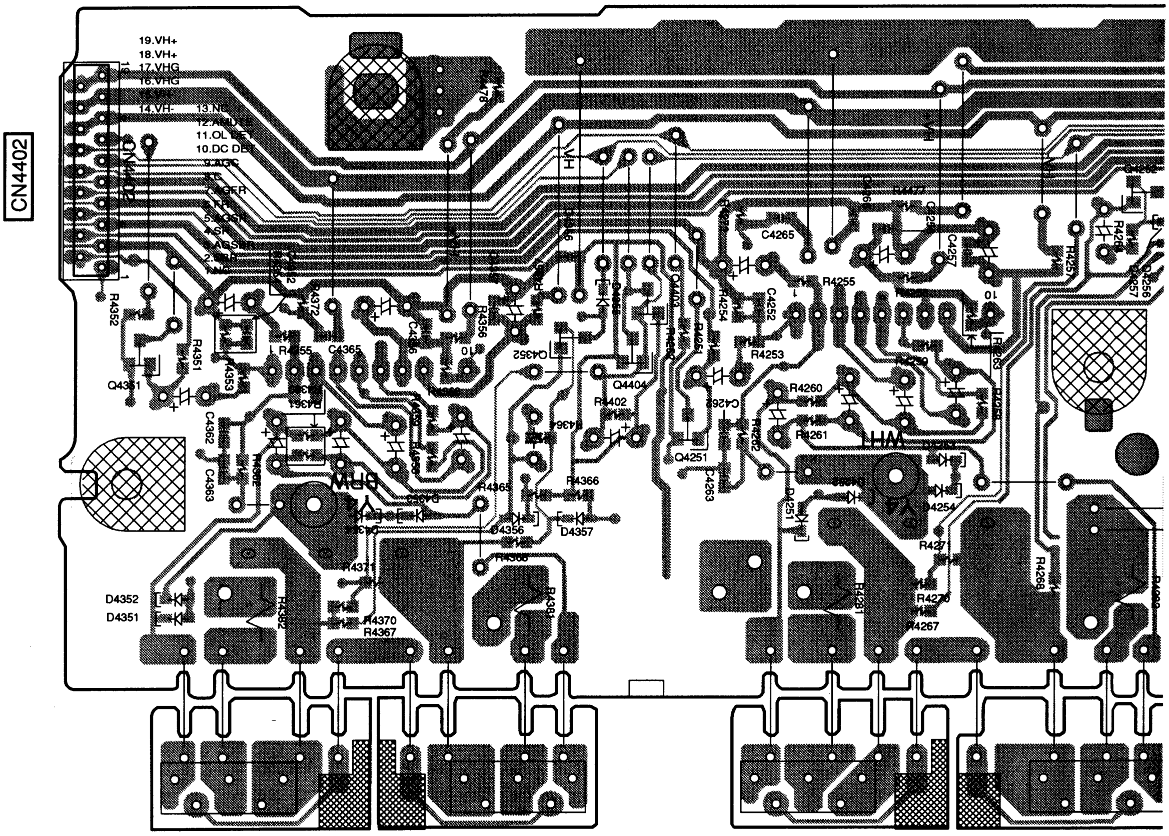
• For VSX-AX5i-S

B

C

D

AA POWER AMP-R ASSY

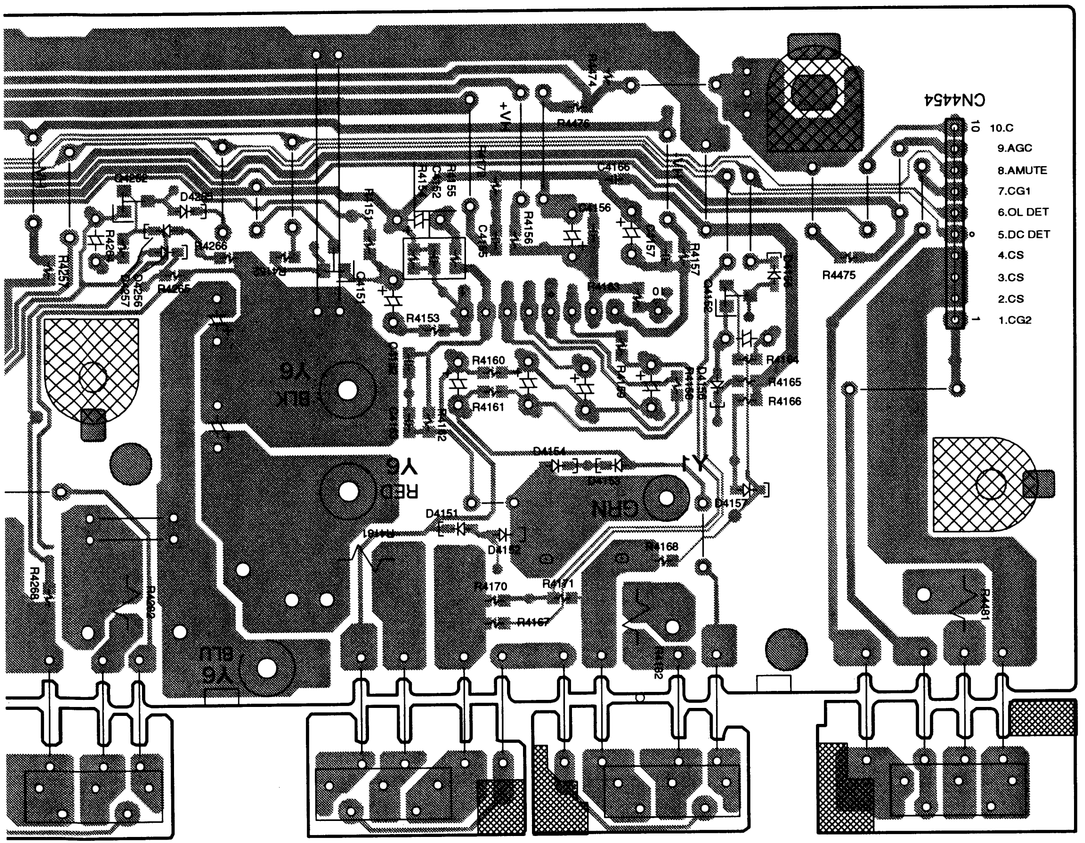

CN4402
19.VH+
18.VH+
17.VHG
16.VHG
14.VH-
13.NC
11.OL DET
10.DC DET
R4352
R4351
Q4351
R4353
C4362
C4363
R4355
C4365
R4372
R4356
Q4352
Q4403
Q4404
R4402
R4365
R4366
D4356
D4357
R4368
R4371
R4370
R4367
R4362
D4352
D4351
C4265
R4254
C4252
R4255
C4257
R4253
R4260
R4261
C4262
Q4251
C4263
D4251
D4254
R4271
R4270
R4267
R4268
BRW
WHT

Q4351 Q4403 Q4252
Q4352 Q4404
Q4251

E

F

SIDE B


CN4454
10.C
9.AGC
8.AMUTE
7.CG1
6.OL DET
5.DC DET
4.CS
3.CS
2.CS
1.CG2
R4474
R4476
R4475
+V
R4156
R4157
C4156
R4153
R4155
R4160
R4161
R4163
R4164
R4165
R4166
R4168
R4170
R4171
R4167
R4266
R4265
R4268
R4481
R4482
D4151
D4152
D4154
D4155
D4157
D4265
D4256
Q4252
Q4151
BLK
RED
GRN
BLU

CN4454

(ANP7485-A)

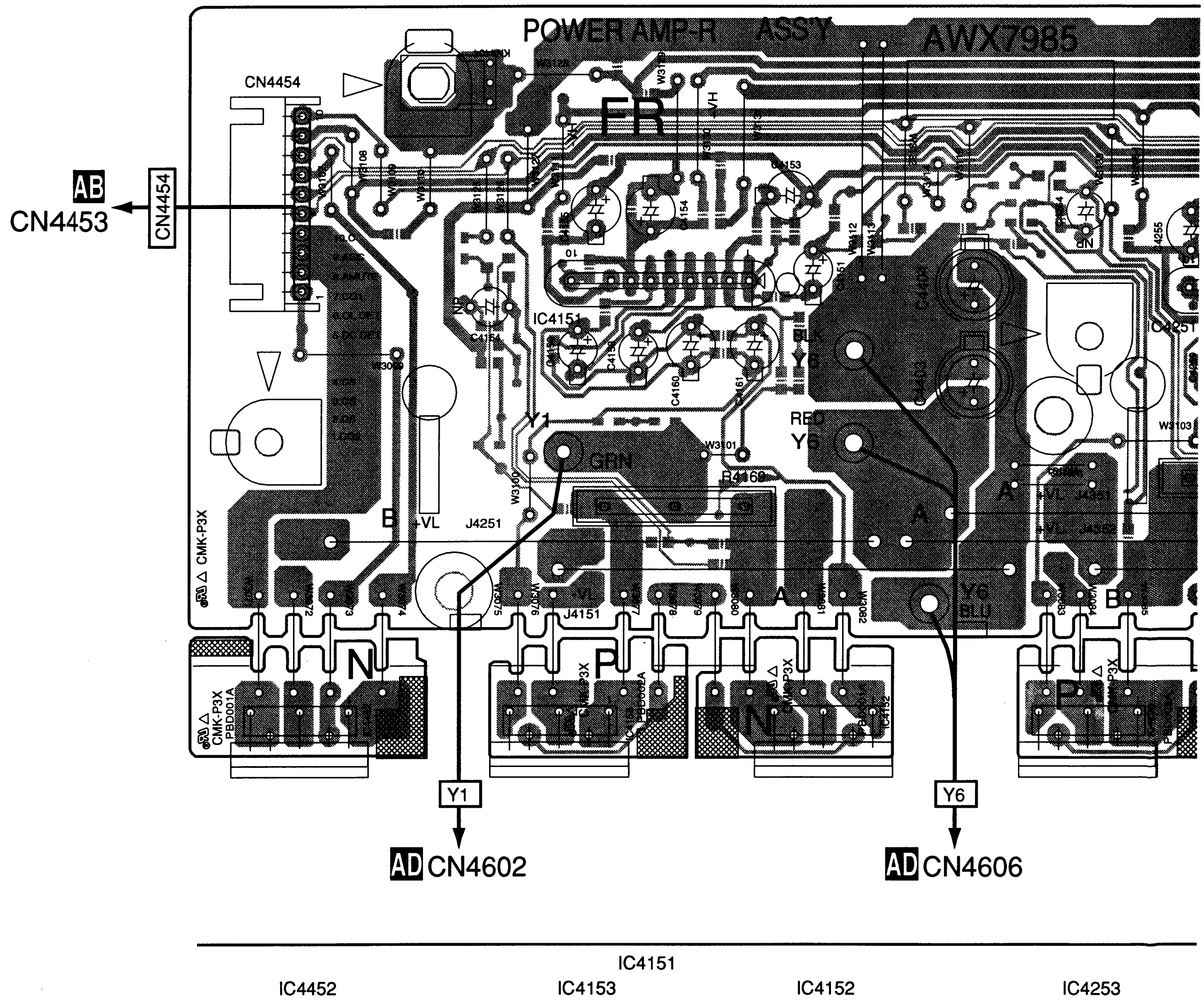
Q4252 Q4151 Q4152

AA

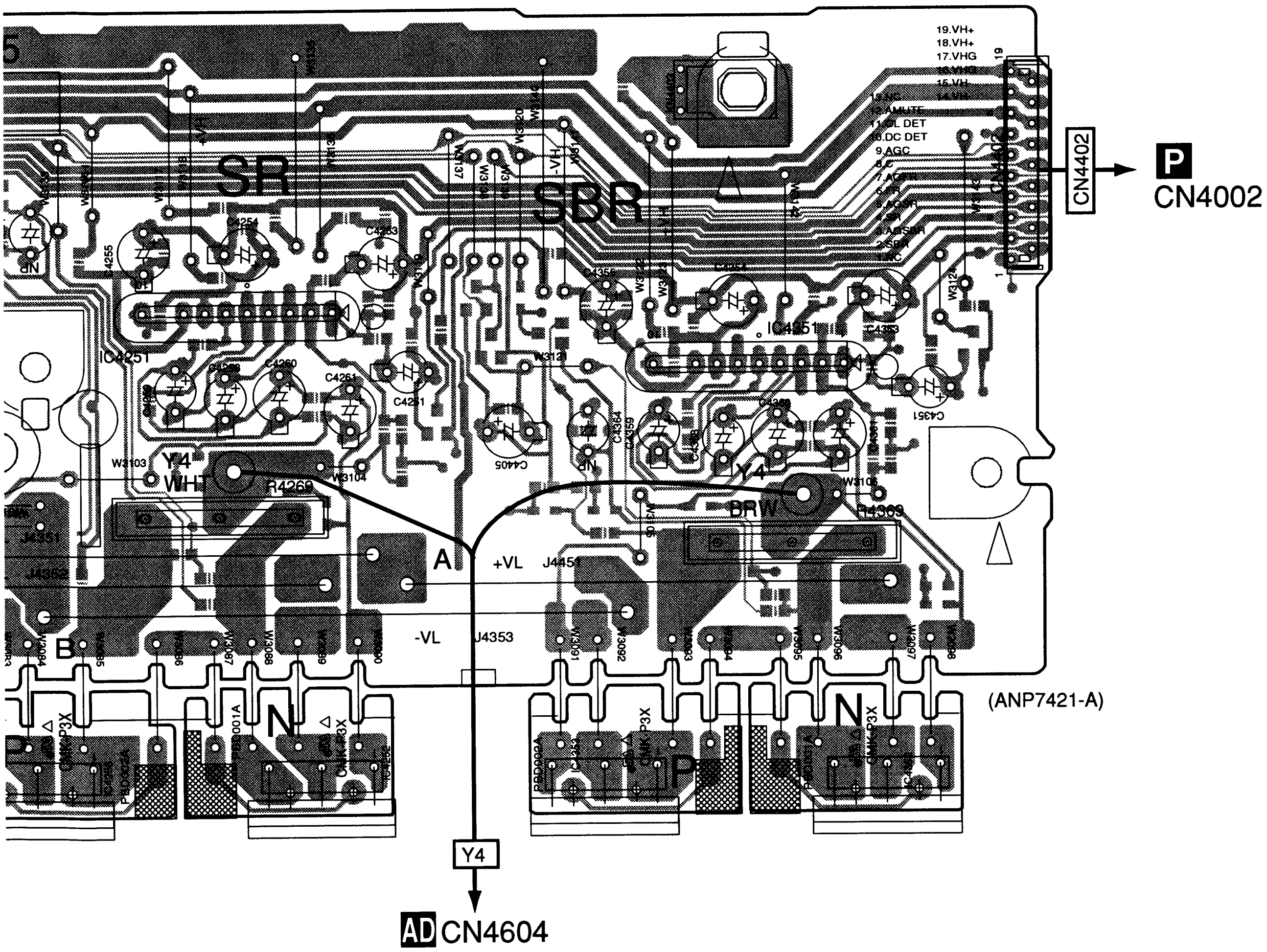
SIDE A

- **For VSX-AX3-S, -K**

AA POWER AMP-R ASSY


POWER AMP-R ASS'Y
AWX7985
FR
CN4454
AB CN4453
CN4454
IC4151
C4154
C4153
C4404
C4403
C4251
BLK
Y5
RED
Y6
Y1
GRN
W3101
R4169
A
+VL
J4451
J4452
B
+VL
J4251
-VL
J4151
Y6
BLU
N
P
CMK-P3X
PBD001A
Y1
Y6
AD CN4602
AD CN4606
IC4151
IC4452
IC4153
IC4152
IC4253

SIDE A


SR
SBR
IC4251
IC4351
C4254
C4253
C4260
C4261
C4251
C4405
C4351
C4353
W3103
W3104
W3105
W3123
Y4
WHT
R4269
Y4
BRW
R4369
A
+VL
-VL
B
J4351
J4352
J4353
J4451
N
P
N
P
19.VH+
18.VH+
17.VHG
16.VHG
15.VH-
14.VH-
13.NC
12.AMUTE
11.OL DET
10.DC DET
9.AGC
CN4402
P
CN4002
(ANP7421-A)
Y4
AD CN4604

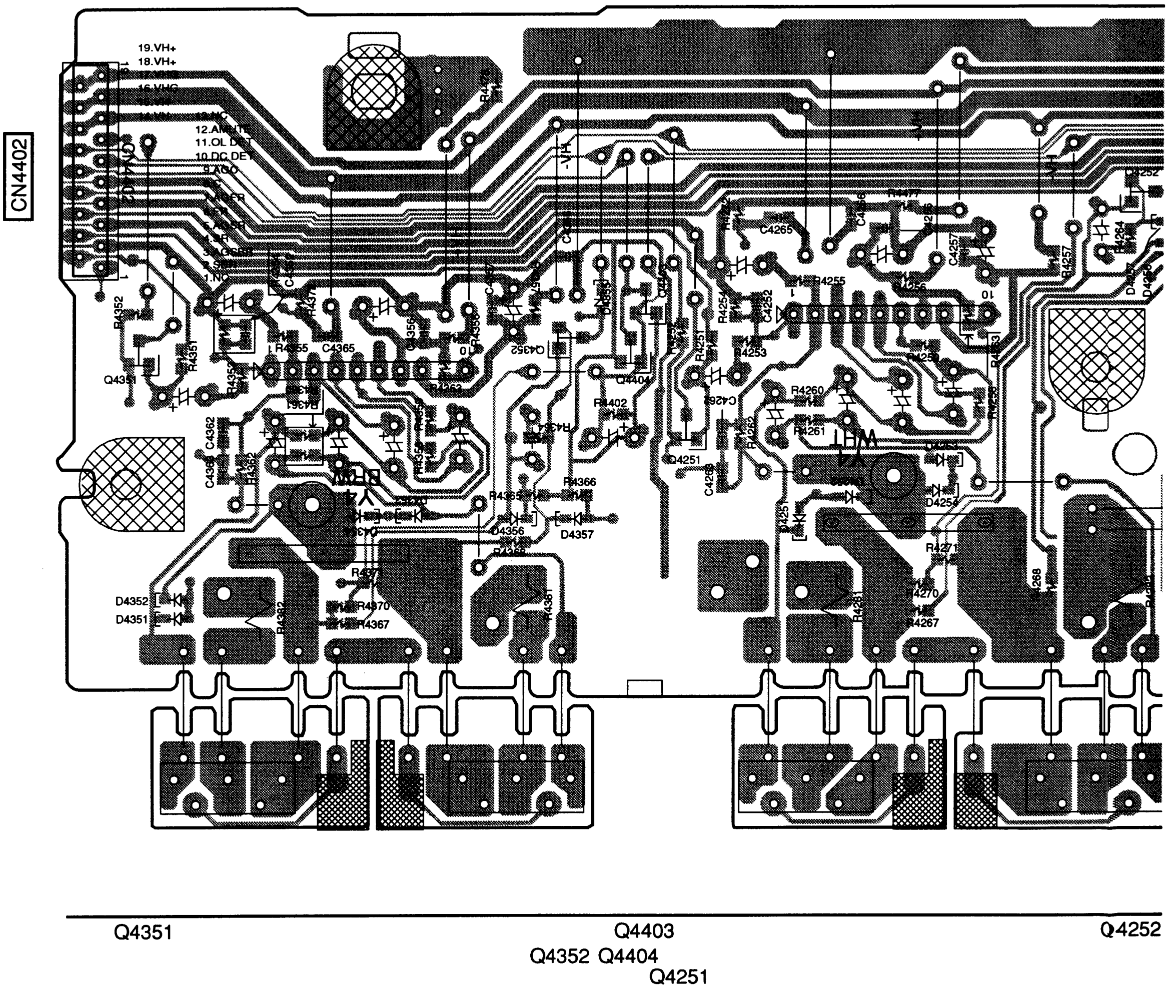
IC4251
IC4351
IC4253
IC4252
IC4353
IC4352

AA

SIDE B

- **For VSX-AX3-S, -K**

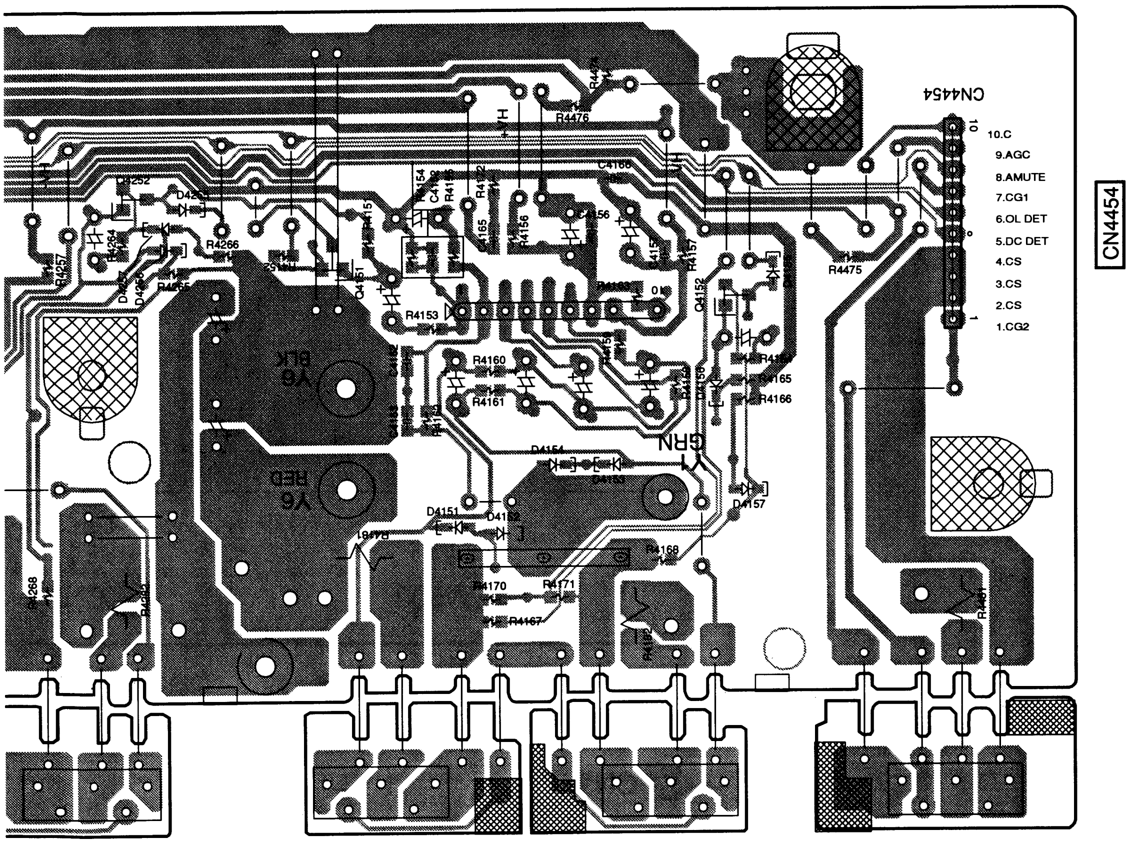
AA POWER AMP-R ASSY


CN4402
19.VH+
18.VH+
16.VHG
12.AMPTE
11.OL DET
10.DC DET
9.AGO
1.NC
R4352
R4351
Q4351
C4365
R4355
C4362
C4361
R4362
Q4352
R4402
C4404
Q4404
R4366
R4365
D4356
D4357
D4352
D4351
R4382
R4370
R4367
R4381
C4265
R4255
R4254
C4252
R4251
R4253
R4260
R4261
C4262
Q4251
D4251
D4254
R4271
R4270
R4267
R4281
C4257
R4257
Q4351
Q4403
Q4352 Q4404
Q4251
Q4252

SIDE B

A

B


CN4454
10
10.C
9.AGC
8.AMUTE
7.CG1
6.OL DET
5.DC DET
4.CS
3.CS
2.CS
1
1.CG2
R4476
R4475
C4156
R4153
R4160
R4161
R4266
R4265
R4257
Q4151
Q4152
R4156
R4157
R4165
R4166
D4154
D4151
D4153
D4157
R4168
R4170
R4171
R4167
Y6 BLK
Y6 RED
GRN
Y1

C

D

(ANP7421-A)

Q4252 Q4151 Q4152

E

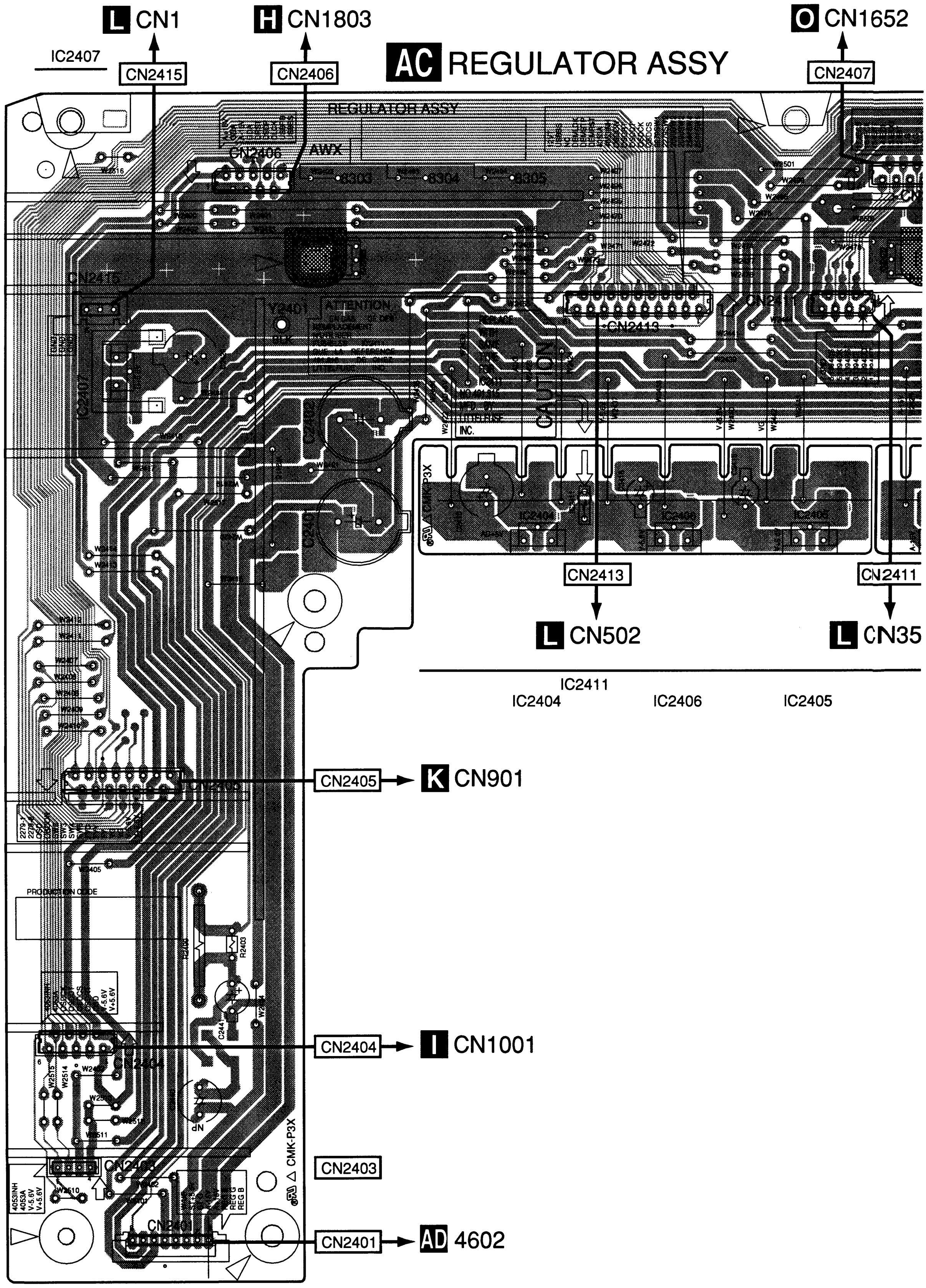
F

AA

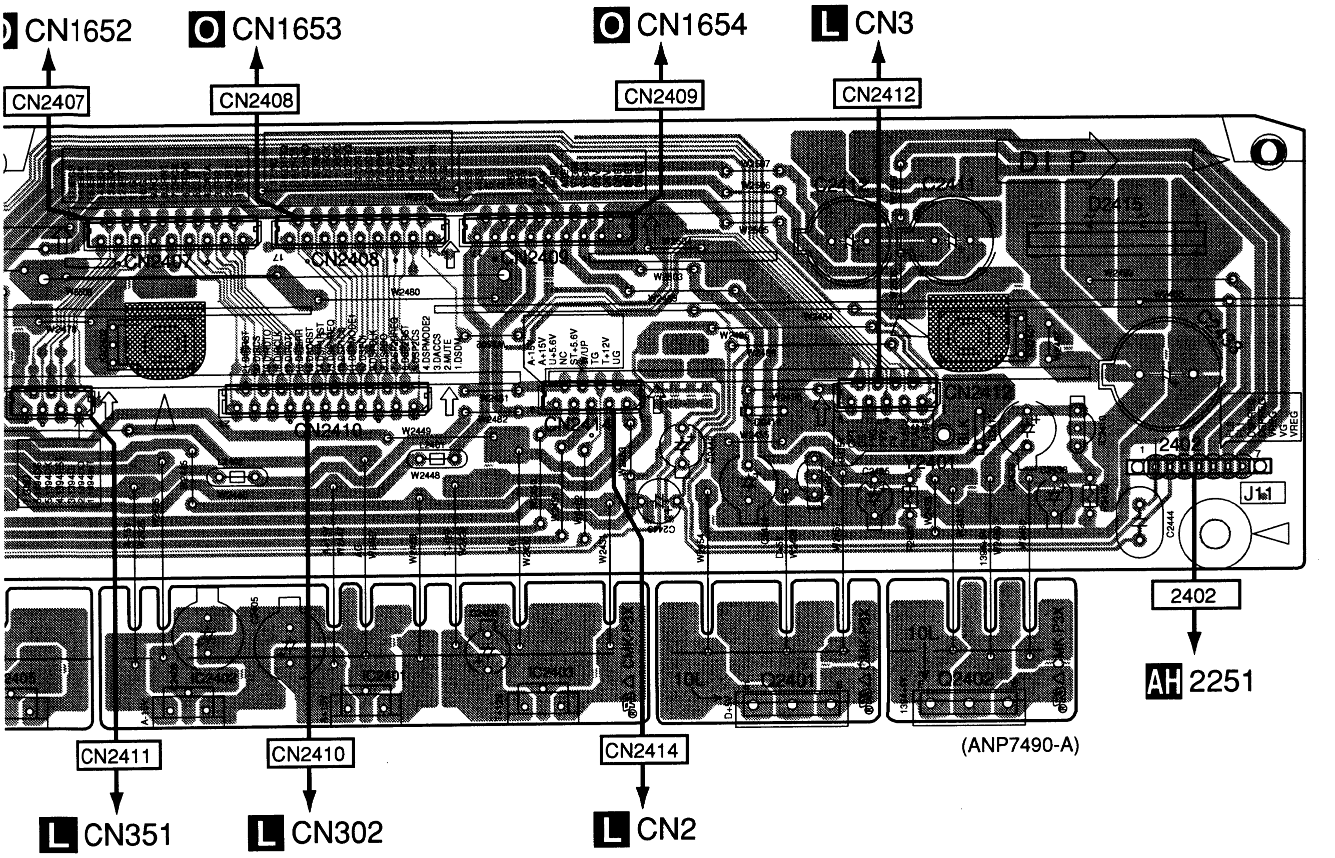
4.18 REGULATOR ASSY

SIDE A

- **For VSX-AX5i-S**


L CN1
H CN1803
O CN1652
IC2407
CN2415
CN2406
AC REGULATOR ASSY
CN2407
REGULATOR ASSY
AWX
CN2413
CN2411
L CN502
L CN35
IC2411
IC2404
IC2406
IC2405
CN2405
K CN901
CN2404
I CN1001
CN2403
CN2401
AD 4602
CAUTION
ATTENTION
PRODUCTION CODE
CMK-P3X

SIDE A

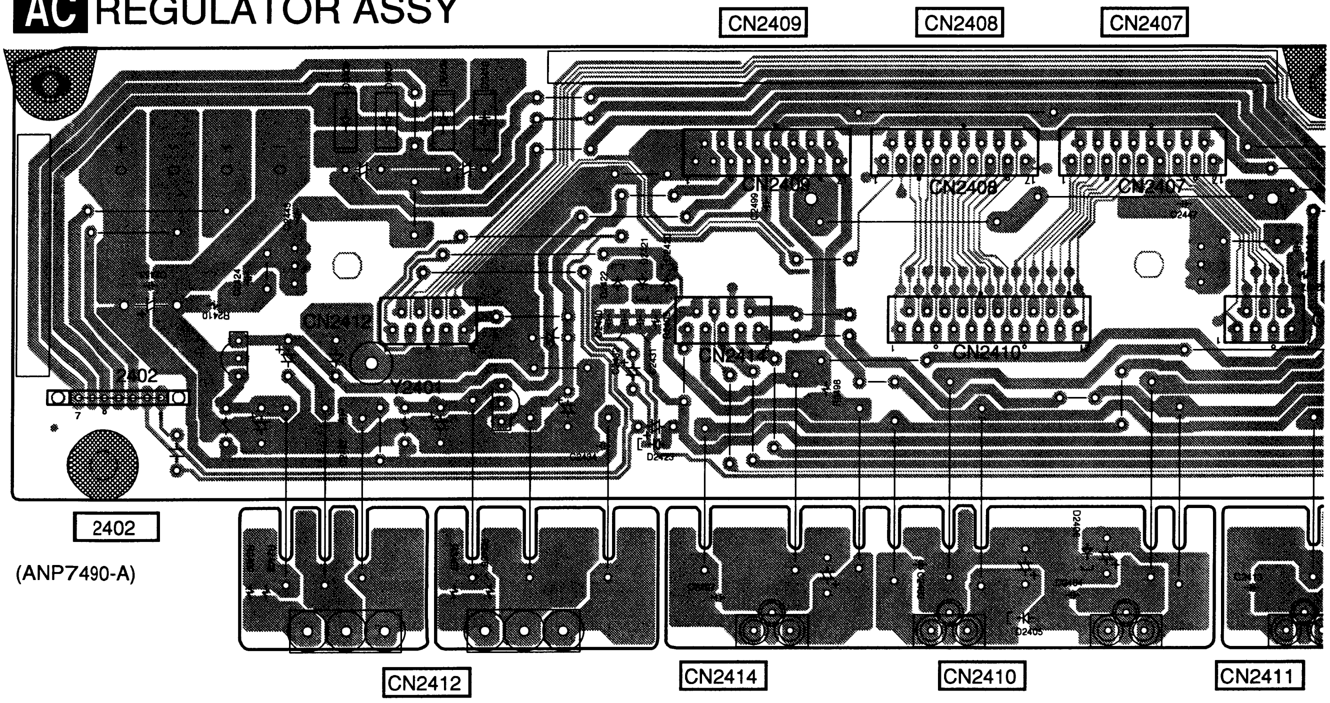

CN1652
O CN1653
O CN1654
L CN3
CN2407
CN2408
CN2409
CN2412
CN2407
CN2408
CN2409
CN2410
CN2412
CN2411
CN2414
D2415
C2411
J1
2402
AH 2251
IC2405
IC2402
IC2401
IC2403
Q2401
Q2402
(ANP7490-A)
CN2411
CN2410
CN2414
L CN351
L CN302
L CN2

				IC2409		IC2410
:405	IC2402	IC2401	IC2403	Q2401	Q2402	

SIDE B

- **For VSX-AX5i-S**

AC REGULATOR ASSY


CN2409
CN2408
CN2407
CN2409
CN2408
CN2407
CN2412
CN2414
CN2410
2402
Y2401
D2423
D2405
2402
CN2412
CN2414
CN2410
CN2411

(ANP7490-A)

SIDE B

A

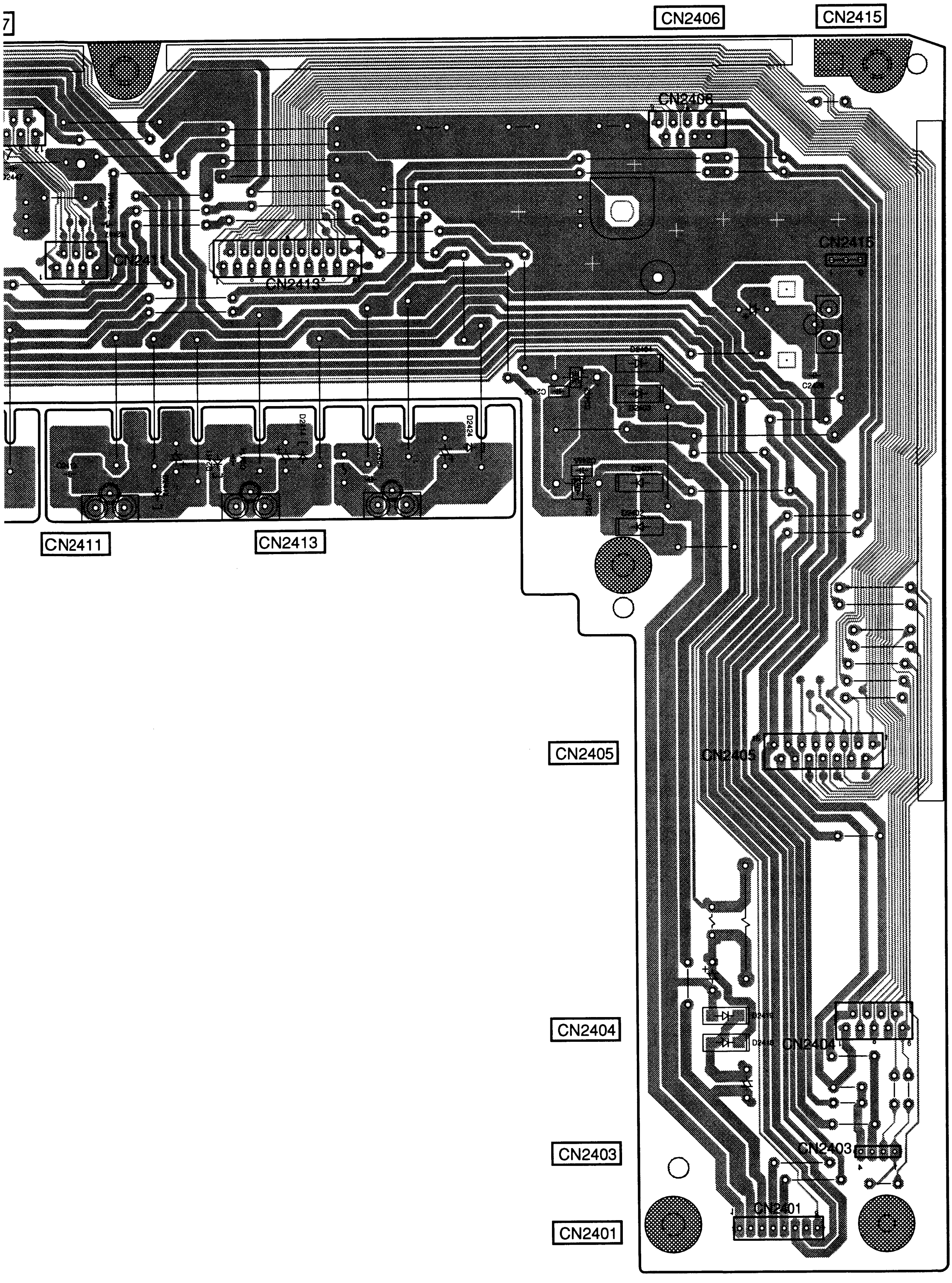
B

C

D

E

F

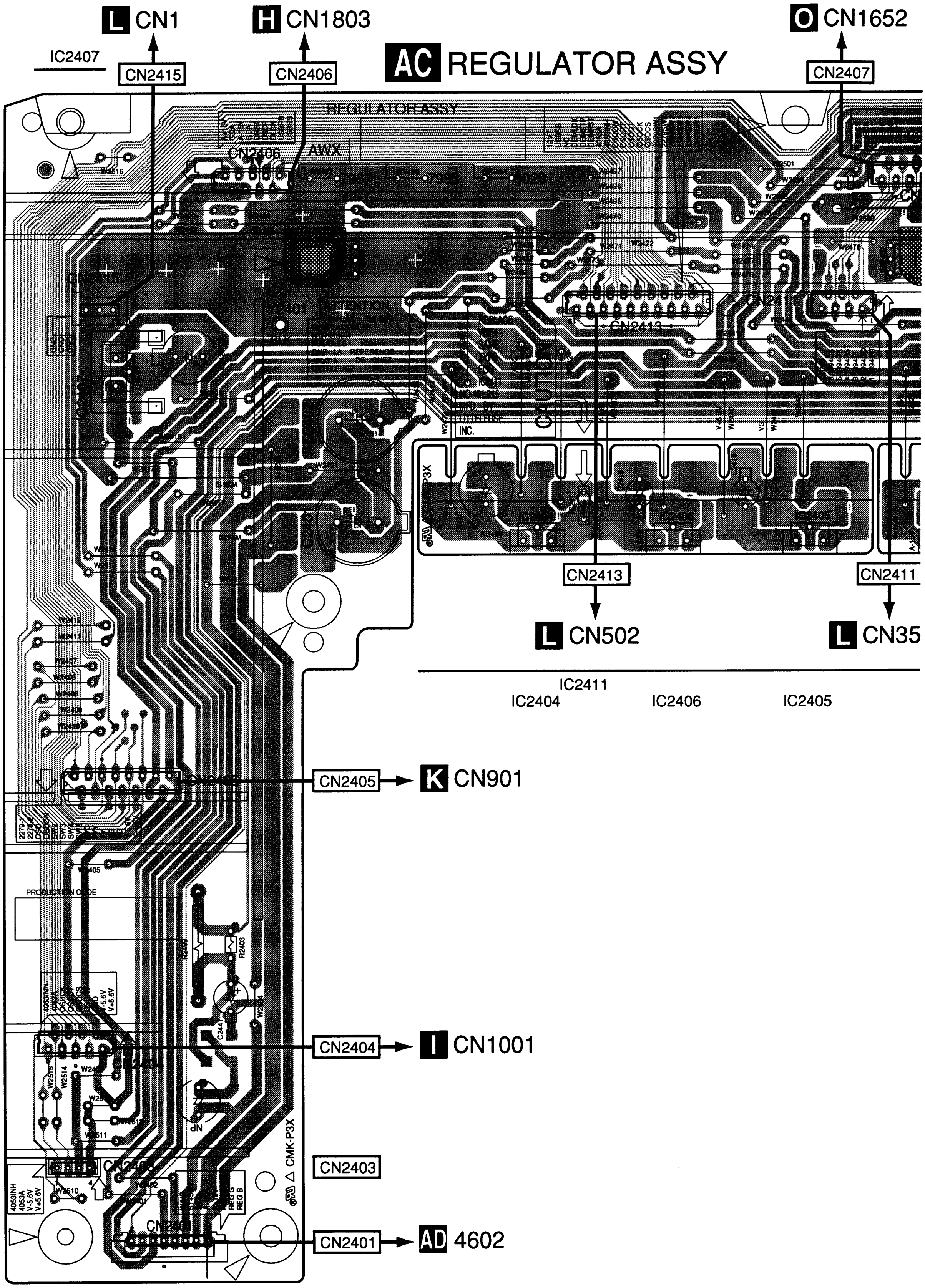

CN2406
CN2415
CN2408
CN2415
CN2419
CN2411
CN2413
D2424
CN2405
CN2405
CN2404
CN2404
CN2403
CN2403
CN2401
CN2401

AC

SIDE A

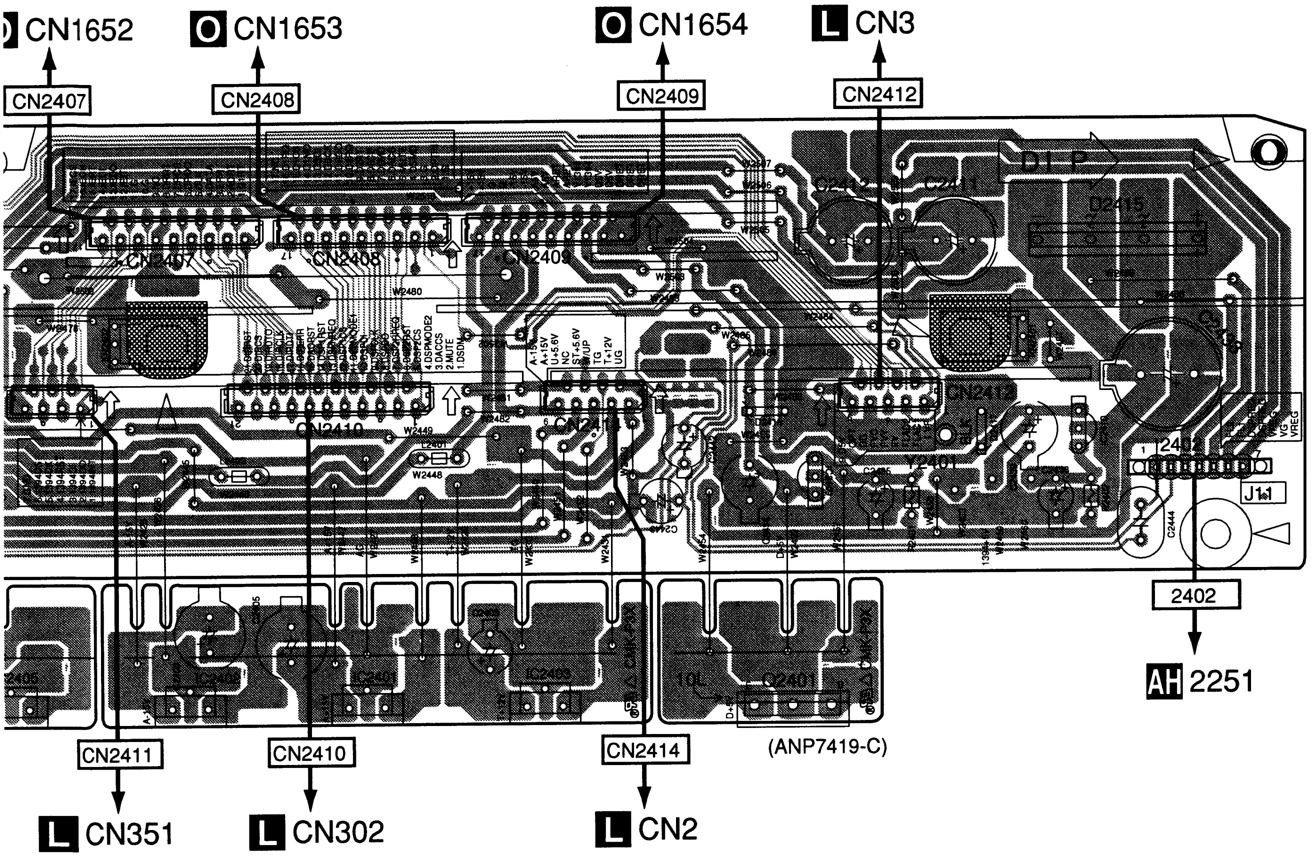
- **For VSX-AX3-S, -K**

AC REGULATOR ASSY


L CN1
H CN1803
O CN1652
IC2407
CN2415
CN2406
CN2407
REGULATOR ASSY
AWX
CN2413
CN2411
L CN502
L CN35
IC2411
IC2404
IC2406
IC2405
CN2405
K CN901
CN2404
I CN1001
CN2403
CN2401
AD 4602
CAUTION
ATTENTION
PRODUCTION CODE
CMK-P3X

AC

SIDE A


CN1652
O CN1653
O CN1654
L CN3
CN2407
CN2408
CN2409
CN2412
CN2411
CN2410
CN2414
2402
AH 2251
L CN351
L CN302
L CN2
D1 P
C2412
C2411
D2415
Q2401
IC2401
IC2403
(ANP7419-C)

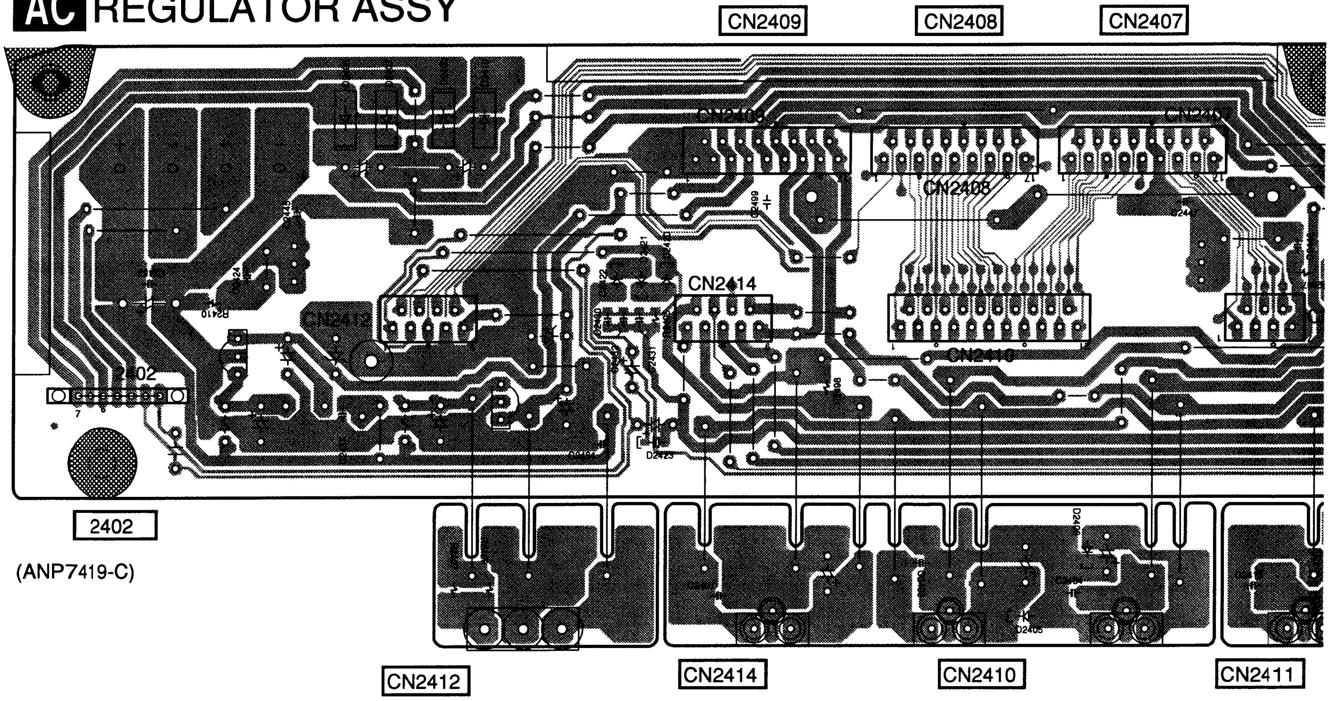
:405 IC2402 IC2401 IC2403 IC2409 Q2401 Q2402 IC2410

AC

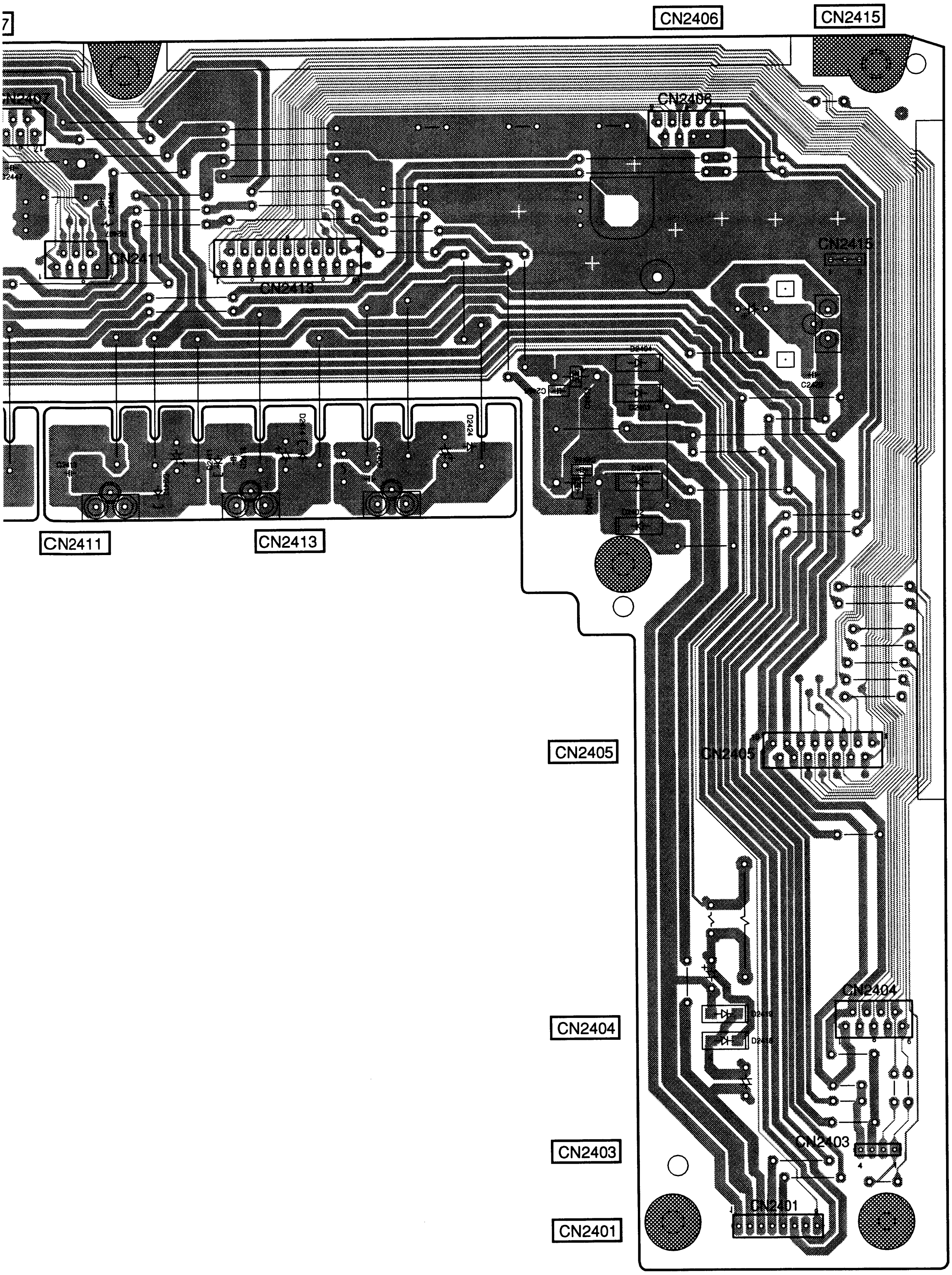
SIDE B

• For VSX-AX3-S, -K

AC REGULATOR ASSY


CN2409
CN2408
CN2407
CN2409
CN2408
CN2407
CN2414
CN2412
CN2410
2402
2402
(ANP7419-C)
CN2412
CN2414
CN2410
CN2411
R2410
D2423
D2405

SIDE B


7
CN2406
CN2415
CN2407
CN2406
CN2415
CN2411
CN2413
CN2411
CN2413
CN2405
CN2405
CN2404
CN2404
CN2403
CN2403
CN2401
CN2401
D2424

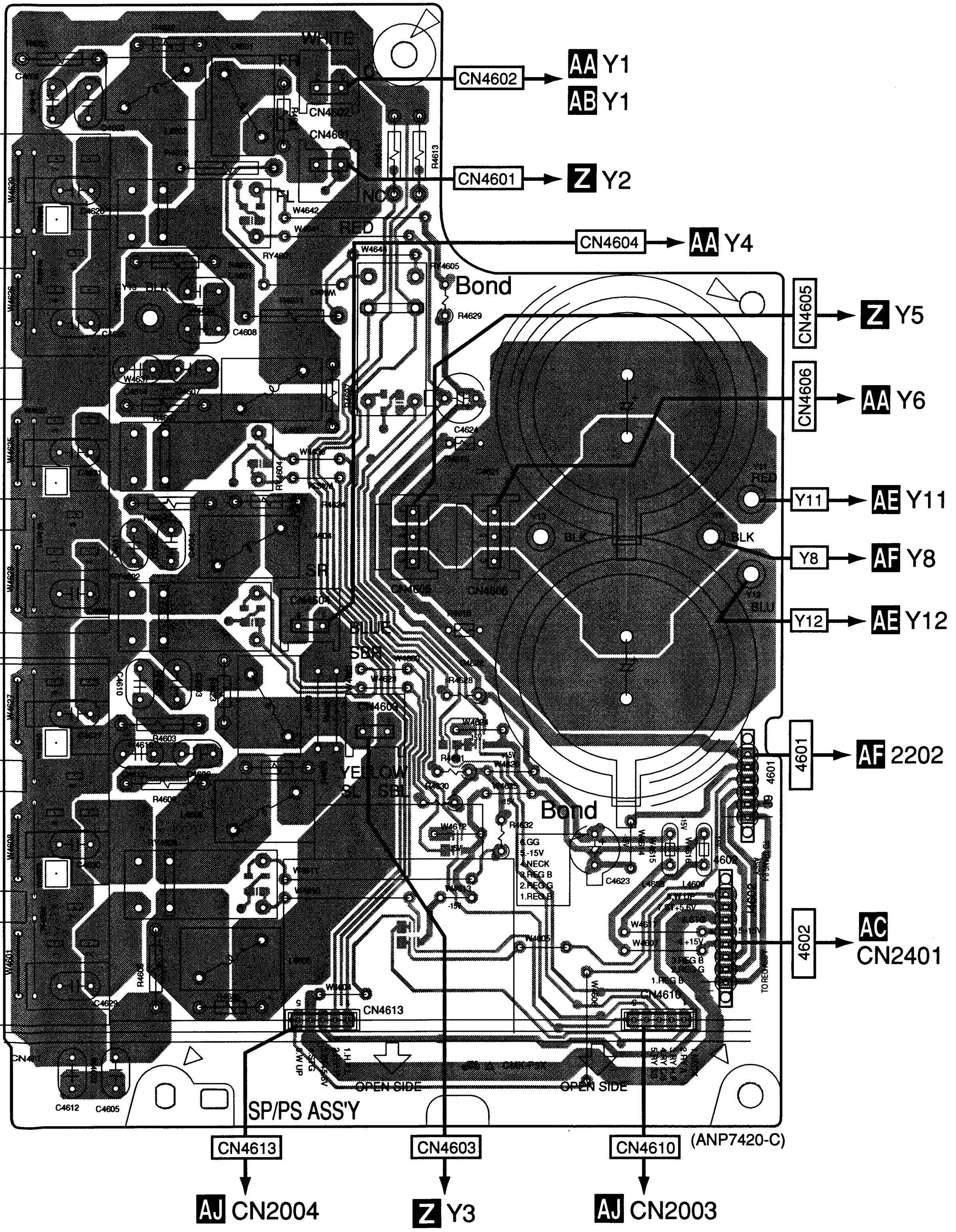
A
B
C
D
E
F

AC

4.19 SP/PS ASSY

SIDE A **SIDE A**

AD SP/PS ASSY


CN4602
AA Y1
AB Y1
CN4601
Z Y2
CN4604
AA Y4
CN4605
Z Y5
CN4606
AA Y6
Y11
AE Y11
Y8
AF Y8
Y12
AE Y12
4601
AF 2202
4602
AC CN2401
WHITE
RED
Bond
BLK
RED
BLU
SR
BLUE
SBR
YELLOW
SL SBL
FL
FR
NC
C4623
CN4613
CN4610
OPEN SIDE
OPEN SIDE
SP/PS ASS'Y
(ANP7420-C)
C4612
C4605
CN4613
AJ CN2004
CN4603
Z Y3
CN4610
AJ CN2003

AD **AD**

SIDE B **SIDE B**

A

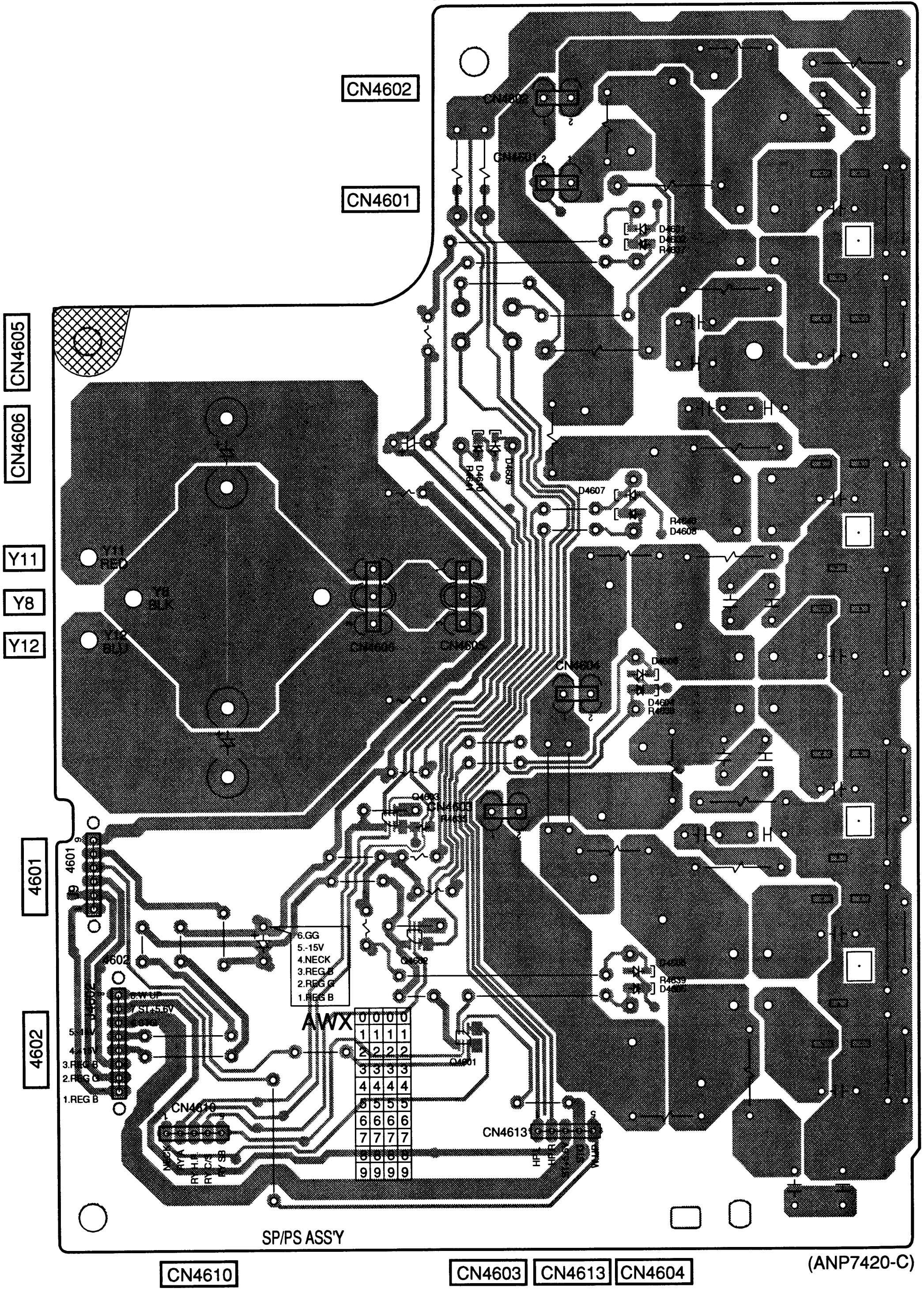
AD SP/PS ASSY

B

C

D

E


CN4602
CN4601
CN4605
CN4606
Y11
Y8
Y12
4601
4602
Y11 RED
Y8 BLK
Y12 BLU
D4607
D4608
CN4604
Q4603
Q4601
6.GG
5.-15V
4.NECK
3.REG B
2.REG G
1.REG B
AWX
CN4610
CN4613
SP/PS ASS'Y
CN4610
CN4603
CN4613
CN4604

(ANP7420-C)

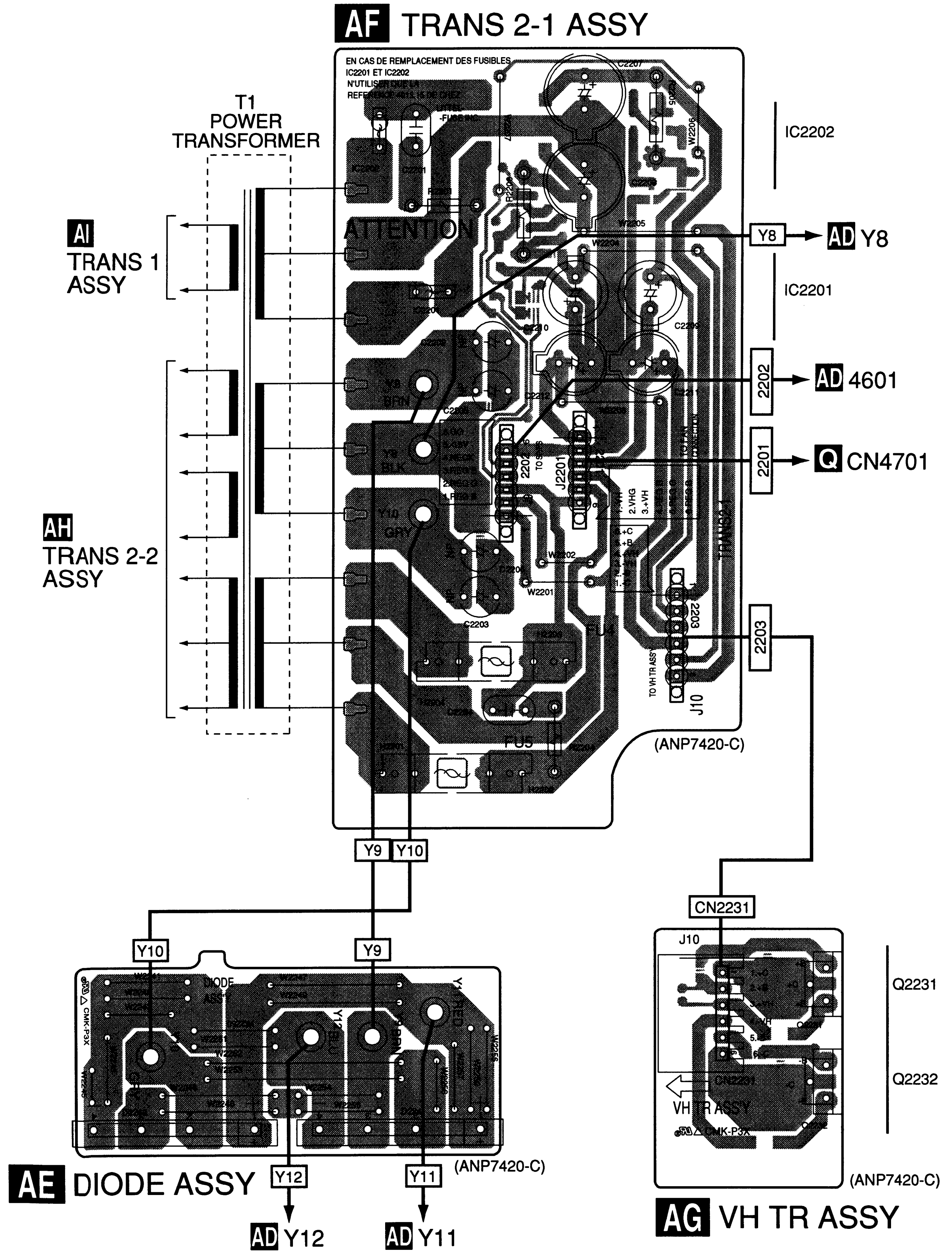
F

Q4603
Q4602
Q4601

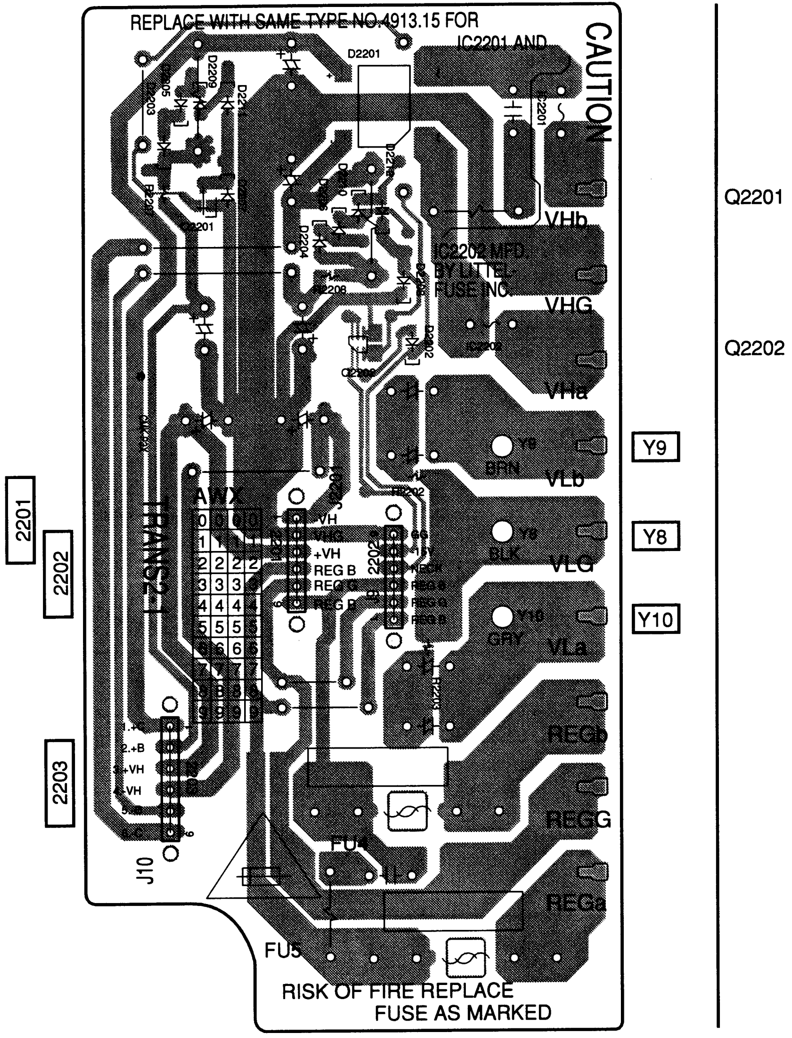
AD **AD**

4.20 DIODE, TRANS 2-1 and VH TR ASSYS

SIDE A **SIDE A**

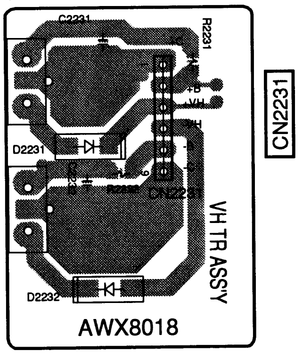

AF TRANS 2-1 ASSY
T1
POWER
TRANSFORMER
AI
TRANS 1
ASSY
AH
TRANS 2-2
ASSY
EN CAS DE REMPLACEMENT DES FUSIBLES
IC2201 ET IC2202
ATTENTION
IC2202
IC2201
Y8
AD Y8
2202
AD 4601
2201
Q CN4701
2203
FU4
FU5
J10
(ANP7420-C)
Y9
Y10
CN2231
J10
Q2231
Q2232
VH TR ASSY
(ANP7420-C)
AG VH TR ASSY
Y10
Y9
AE DIODE ASSY
Y12
Y11
(ANP7420-C)
AD Y12
AD Y11

AF TRANS 2-1 ASSY

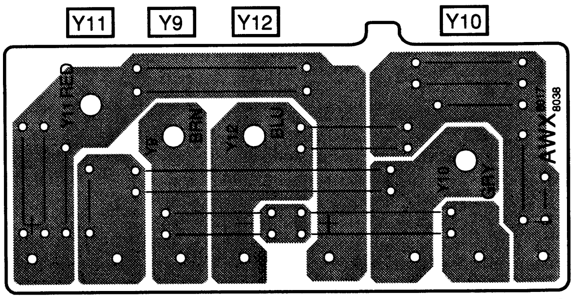

REPLACE WITH SAME TYPE NO.4913.15 FOR
IC2201 AND
IC2202 MFD.
BY LITTEL-
FUSE INC.
CAUTION
D2201
D2209
D2202
D2204
D2208
Q2201
Q2202
IC2202
VHb
VHG
VHa
VLb
VLG
VLa
REGb
REGG
REGa
Y9
BRN
Y8
BLK
Y10
GRY
AWX
TRANS2-1
+VH
VHG
REG B
REG G
1.+C
2.+B
3.+VH
4.-VH
5.-C
J10
2201
2202
2203
FU4
FU5
RISK OF FIRE REPLACE
FUSE AS MARKED

(ANP7420-C)

AG VH TR ASSY


C2231
R2231
CN2231
D2231
D2232
R2232
VH TR ASSY
AWX8018

(ANP7420-C)


Y11
Y9
Y12
Y10
Y11 RED
BRN
Y12
BLU
Y10
GRY
AWX8038

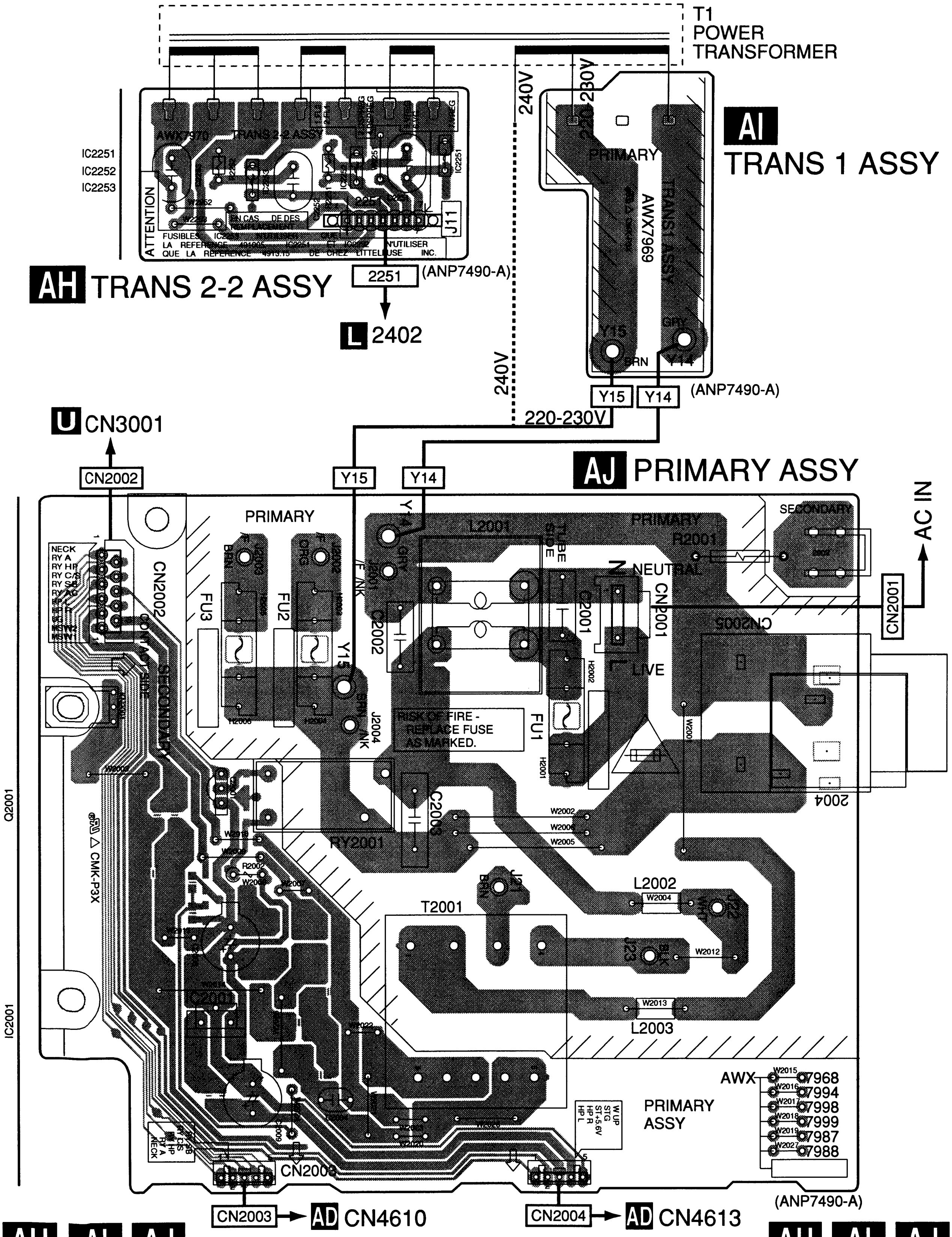
(ANP7420-C)

AE DIODE ASSY

4.21 TRANS 2-2, TRANS 1 and PRIMARY ASSYS

SIDE A **SIDE A**

- **For VSX-AX5i-S**


T1
POWER
TRANSFORMER
240V
220-230V
AI TRANS 1 ASSY
PRIMARY
AWX7969
TRANS1 ASSY
Y15
Y14
BRN
GRY
(ANP7490-A)
IC2251
IC2252
IC2253
AWX7970
TRANS 2-2 ASSY
ATTENTION
J11
AH TRANS 2-2 ASSY
2251
(ANP7490-A)
L 2402
240V
220-230V
U CN3001
CN2002
Y15
Y14
AJ PRIMARY ASSY
AC IN
CN2001
PRIMARY
SECONDARY
NECK
RY A
RY HP
RY C/S
RY SB
RY AC
FU3
FU2
FU1
L2001
R2001
NEUTRAL
LIVE
C2001
C2002
C2003
CN2005
2004
RISK OF FIRE - REPLACE FUSE AS MARKED.
RY2001
T2001
L2002
L2003
W2002
W2004
W2005
W2012
W2013
CMK-P3X
Q2001
IC2001
C2001
AWX
W2015 7968
W2016 7994
W2017 7998
W2018 7999
W2019 7987
W2021 7988
PRIMARY
ASSY
CN2003
AD CN4610
CN2004
AD CN4613
(ANP7490-A)

AH AI AJ AH AI AJ

SIDE B

SIDE B

• For VSX-AX5i-S

● Line Voltage Selection

Line Voltage can be changed by the following modification:

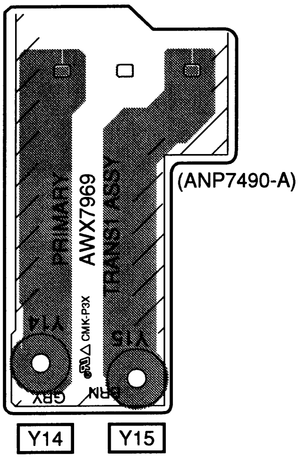
1. Disconnect the AC power cord.
2. Remove the cover.
3. Change the connection wire from TRANS 1 ASSY to PRIMARY ASSY (Terminal No. Y15) as follows.

Voltage	Terminal No.
220-230V	Y15 of TRANS 1 ASSY
240V	240V terminal of power transformer

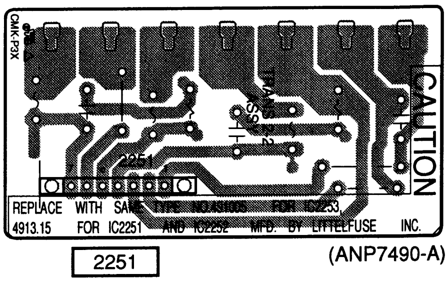
4. Stick a line voltage label on the rear panel.

Description	Part No.
220V label	AAX-193
240V label	AAX-192

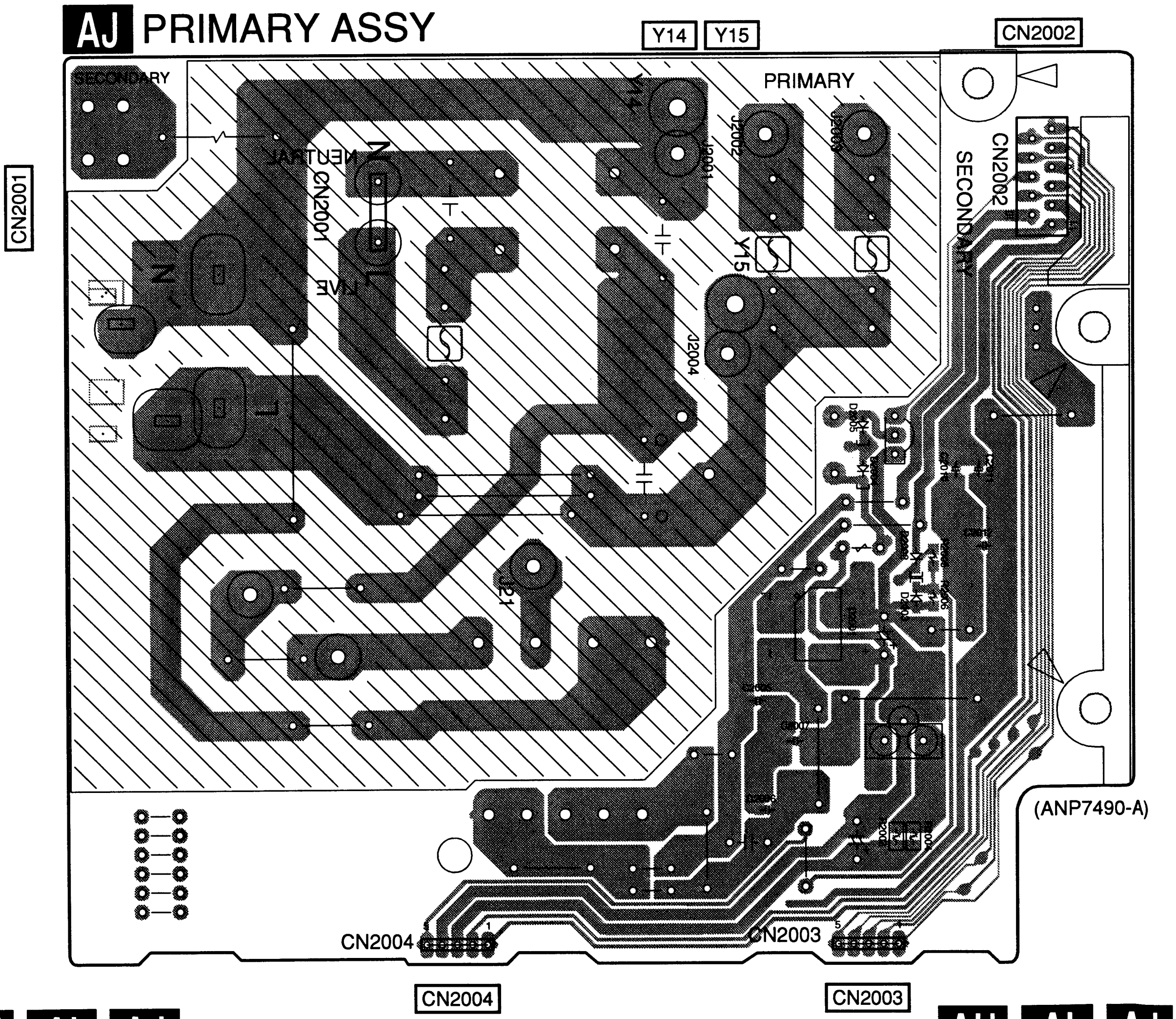
AI TRANS 1 ASSY


PRIMARY
AWX7969
TRANS1 ASSY
CMK-P3X
Y14
Y15
GBX
BRN
(ANP7490-A)
Y14
Y15

AH TRANS 2-2 ASSY


CMK-P3X
TRANS 2-2 ASSY
2251
CAUTION
REPLACE WITH SAME TYPE NO.AS1005 FOR IC2253
4913.15 FOR IC2251 AND IC2252 MFD. BY LITTELFUSE INC.
(ANP7490-A)
2251

AJ PRIMARY ASSY


Y14
Y15
CN2002
SECONDARY
PRIMARY
CN2001
NEUTRAL
CN2001
LIVE
N
L
Y14
J2001
J2002
J2003
Y15
J2004
CN2002
SECONDARY
L21
(ANP7490-A)
CN2004
CN2003
CN2004
CN2003

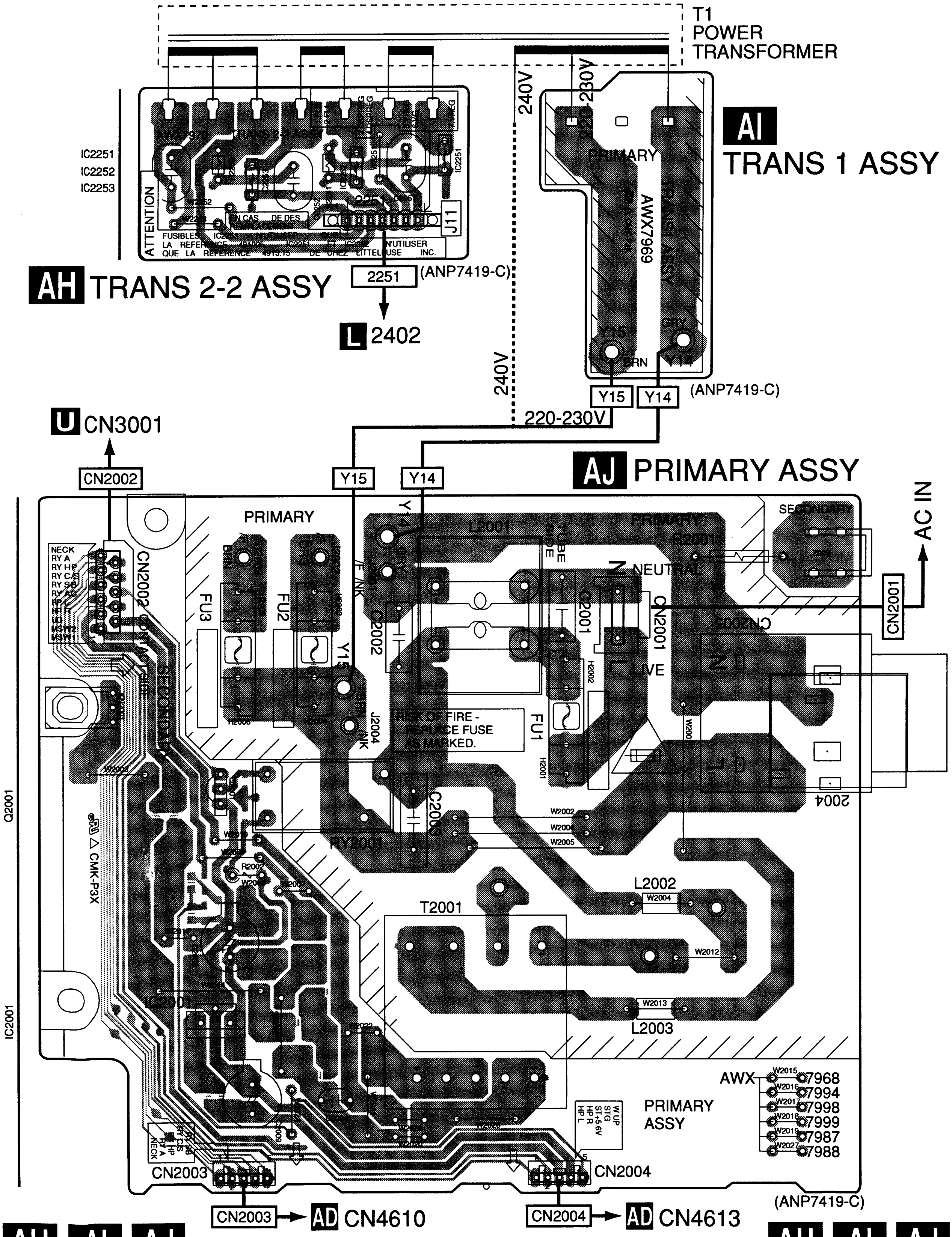
AH AI AJ

AH AI AJ

SIDE A

• For VSX-AX3-S, -K

SIDE A


T1
POWER
TRANSFORMER
240V
220-230V
AI
TRANS 1 ASSY
PRIMARY
AWX7969
TRANS1 ASSY
Y15
Y14
BRN
GRY
(ANP7419-C)
IC2251
IC2252
IC2253
ATTENTION
AWX7970
TRANS 2-2 ASSY
J11
2251
(ANP7419-C)
AH TRANS 2-2 ASSY
L 2402
U CN3001
CN2002
AJ PRIMARY ASSY
AC IN
CN2001
PRIMARY
SECONDARY
L2001
R2001
NEUTRAL
LIVE
FU1
FU2
FU3
C2001
C2002
C2003
CN2005
2004
RISK OF FIRE - REPLACE FUSE AS MARKED.
RY2001
L2002
L2003
T2001
W2002
W2005
W2004
W2012
W2013
IC2001
Q2001
CMK-P3X
NECK
RY A
RY HP
RY C/S
RY SB
RY AC
MSW2
MSW1
AWX
W2015 7968
W2016 7994
W2017 7998
W2018 7999
W2019 7987
W2027 7988
PRIMARY
ASSY
W UP
STG
ST+5.6V
HP R
HP L
CN2003
CN2004
AD CN4610
AD CN4613
(ANP7419-C)

AH AI AJ

AH AI AJ

SIDE B

• For VSX-AX3-S, -K

SIDE B

● Line Voltage Selection

Line Voltage can be changed by the following modification:

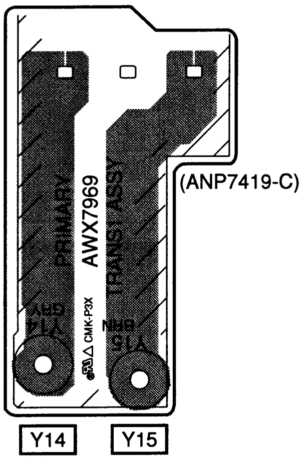
1. Disconnect the AC power cord.
2. Remove the cover.
3. Change the connection wire from TRANS 1 ASSY to PRIMARY ASSY (Terminal No. Y15) as follows.

Voltage	Terminal No.
220-230V	Y15 of TRANS 1 ASSY
240V	240V terminal of power transformer

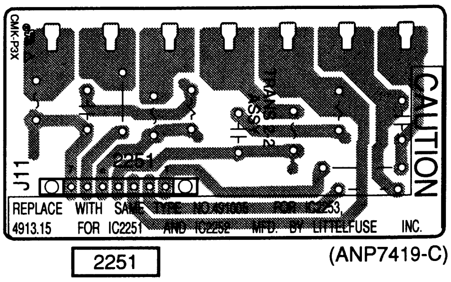
4. Stick a line voltage label on the rear panel.

Description	Part No.
220V label	AAX-193
240V label	AAX-192

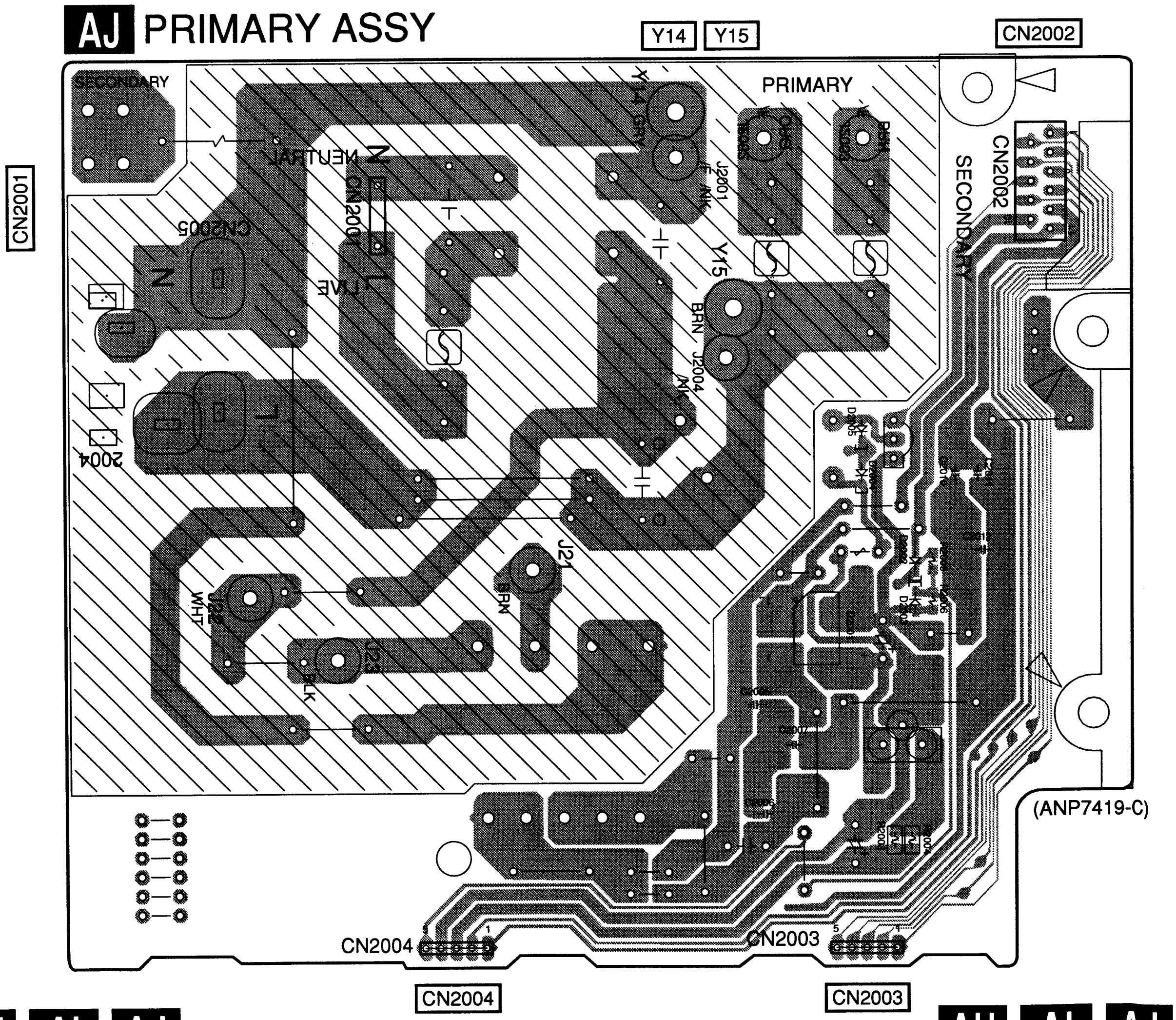
AI TRANS 1 ASSY


PRIMARY
AWX7969
TRANS1 ASSY
CMK-P3X
Y14 GRY
Y15 BRN
(ANP7419-C)
Y14
Y15

AH TRANS 2-2 ASSY


CMK-P3X
J11
2251
CAUTION
REPLACE WITH SAME TYPE NO.491005 FOR IC2253,
4913.15 FOR IC2251 AND IC2252 MFD. BY LITTELFUSE INC.
2251
(ANP7419-C)

AJ PRIMARY ASSY

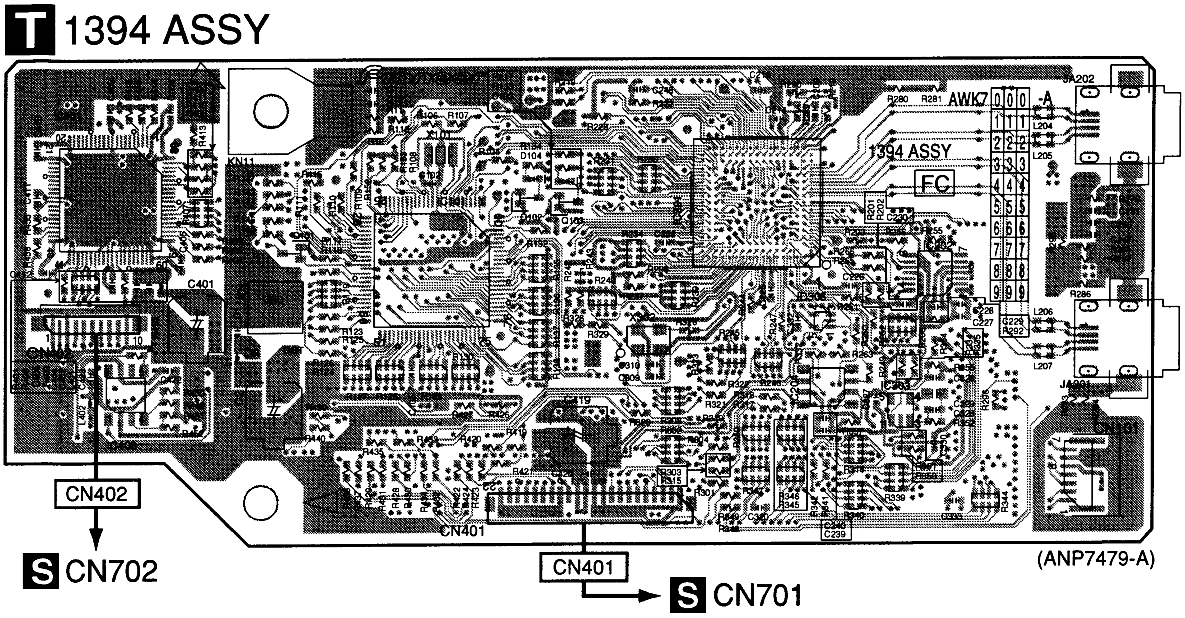

Y14
Y15
CN2002
CN2001
SECONDARY
PRIMARY
NEUTRAL
CN2001
CN2005
N
LIVE
L
2004
Y14 GRY
J2001
Y15 BRN
J2004
J21 BRN
J22 WHT
J23 BLK
CN2002
SECONDARY
(ANP7419-C)
CN2004
CN2003
CN2004
CN2003

AH AI AJ

AH AI AJ

4.22 1394 ASSY (VSX-AX5i-S ONLY)

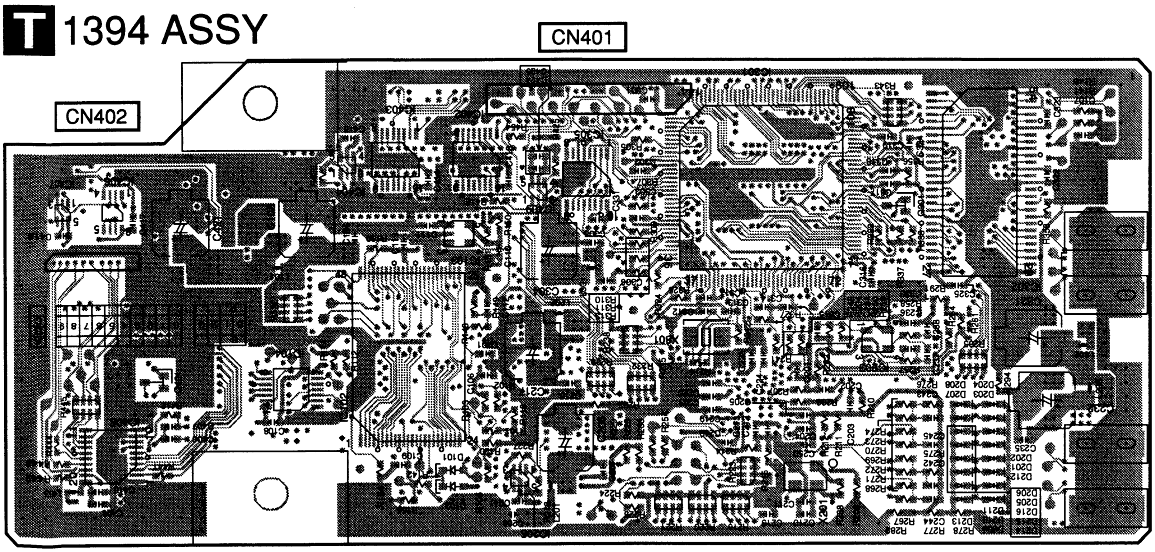
SIDE A **SIDE A**


T 1394 ASSY
CN402
S CN702
CN401
CN401
S CN701
1394 ASSY
AWK7
FC
JA202
JA201
CN101
C401
KN11

(ANP7479-A)

IC401 IC408 Q101 IC101 Q102 Q103 IC201 IC306 IC205 IC303 IC202

SIDE B **SIDE B**


T 1394 ASSY
CN401
CN402

(ANP7479-A)

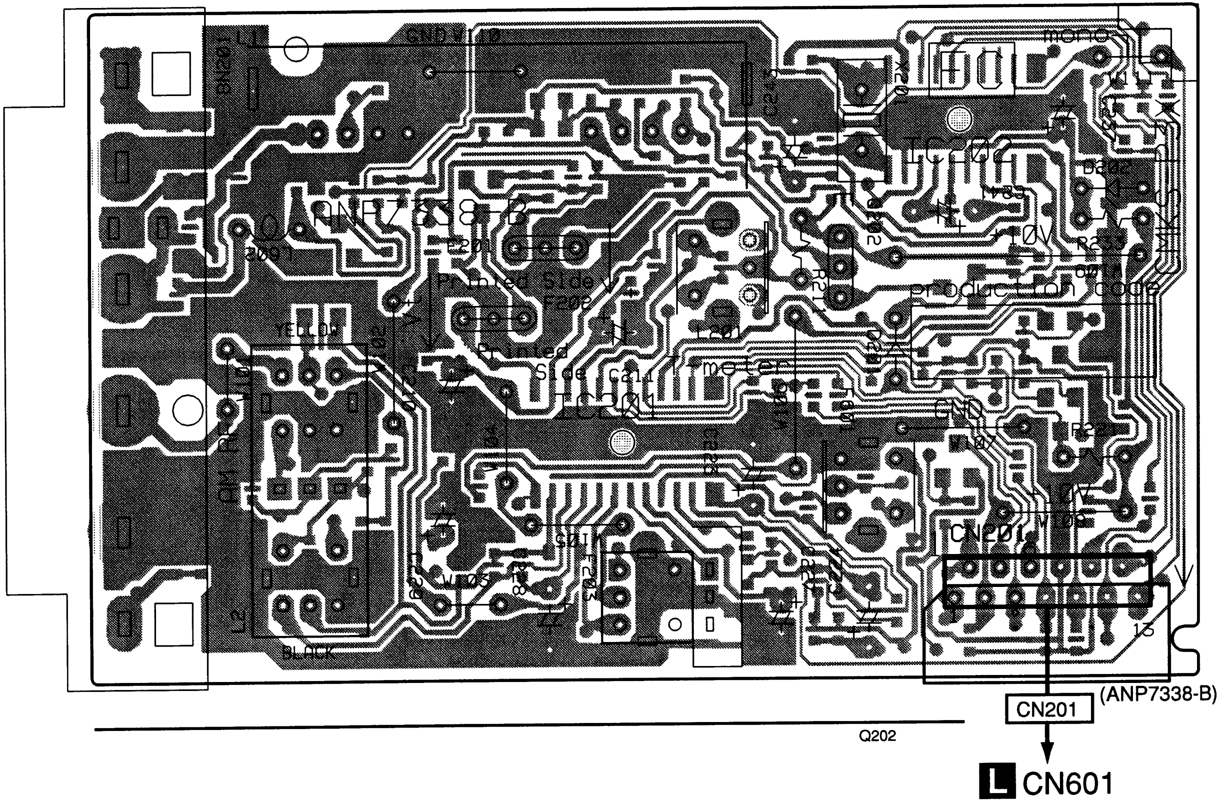
IC407 IC406 IC405 Q401 IC104 IC404 IC403 IC102 IC103 IC402 IC409 IC205 IC305 IC301 Q301 IC203

4.23 FM/AM TUNER MODULE

SIDE A

AK FM/AM TUNER MODULE

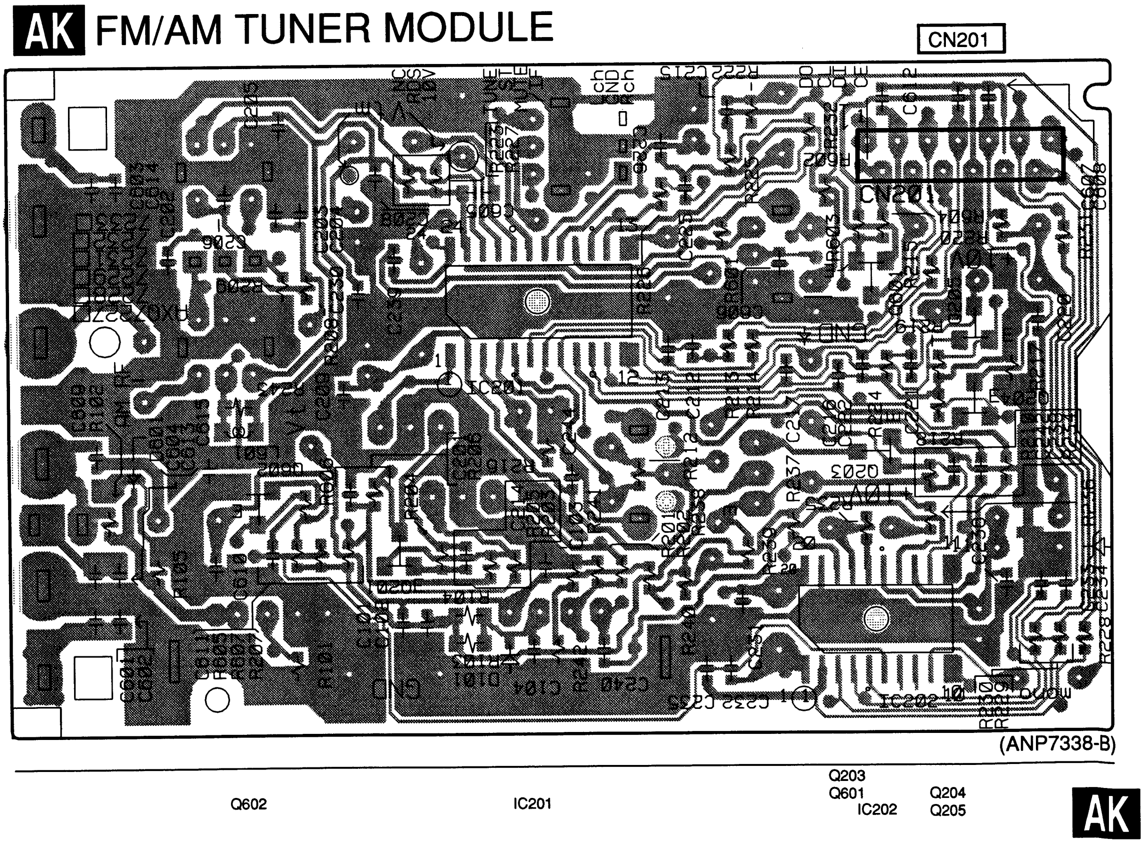
SIDE A


(ANP7338-B)
CN201
Q202
L CN601
IC202
IC201
CN201
AM ANT
YELLOW
BLACK
Printed Side
product ion code
meter
GND
mono
+10V

SIDE B

SIDE B

AK FM/AM TUNER MODULE


CN201
(ANP7338-B)
Q203
Q601
Q204
Q602
IC201
IC202
Q205
CN201
IC201
IC202
GND

AK

AK

5. PCB PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56×10^1 → *561* .... *RD1/4PU*$\boxed{5}\boxed{6}\boxed{1}$*J*
47k Ω → 47×10^3 → *473* .... *RD1/4PU*$\boxed{4}\boxed{7}\boxed{3}$*J*
0.5 Ω → *R50* .... *RN2H*$\boxed{R}\boxed{5}\boxed{0}$*K*
1 Ω → *1R0* .... *RS1P*$\boxed{1}\boxed{R}\boxed{0}$*K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562×10^1 → *5621* .... *RN1/4PC*$\boxed{5}\boxed{6}\boxed{2}\boxed{1}$*F*

• LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	VSX-AX5i-S/ HYXJI	VSX-AX3-S/ HYXJI	VSX-AX3-K/ HYXJI
	1..FM/AM TUNER MODULE	AXQ7232	AXQ7232	AXQ7232
NSP	1..REGULATOR ASSY	AWK7786	AWK7738	AWK7738
	2..7.1 CH I/O ASSY	AWX8306	AWX7973	AWX7973
	2..POWER AMP IN ASSY	AWX7982	AWX7982	AWX7982
	2..FAN DRIVE ASSY	AWX8135	AWX8135	AWX8135
	2..REGULATOR ASSY	AWX8305	AWX8020	AWX8020
	2..TRANS 2-2 ASSY	AWX7970	AWX7970	AWX7970
	2..TRANS 1 ASSY	AWX7969	AWX7969	AWX7969
	2..PRIMARY ASSY	AWX7998	AWX7998	AWX7998
NSP	1..COMPLEX ASSY	AWK7790	AWK7796	AWK7796
	2..V-AUDIO IN ASSY	AWX8314	AWX7991	AWX7991
	2..FRONT IN ASSY	AWX8186	AWX8186	AWX8186
	2..OPTICAL IN ASSY	AWX7978	AWX7978	AWX7978
	2..INPUT CONNECT ASSY	AWX8041	AWX8041	AWX8041
	2..VOLUME ASSY	AWX7971	AWX7971	AWX7971
	2..MULTI JOG ASSY	AWX8015	AWX8015	AWX8015
	2..HEADPHONE ASSY	AWX7980	AWX7980	AWX7980
	2..SP/PS ASSY	AWX8308	AWX8039	AWX8039
	2..DIODE ASSY	AWX8017	AWX8017	AWX8017
	2..TRANS 2-1 ASSY	AWX8326	AWX8326	AWX8326
	2..VH TR ASSY	AWX8018	AWX8018	AWX8018
	2..MECHA SW ASSY	AWX7995	AWX7995	AWX7995
NSP	1..MAIN ASSY	AWK7778	AWK7782	AWK7782
	2..COAXIAL IN ASSY	AWX8300	AWX8323	AWX8323
	2..VIDEO ASSY	AWX8312	AWX8322	AWX8322
	2..COMPONENT ASSY	AWX8293	AWX8296	AWX8296
	2..MAIN CONTROL ASSY	AWX8287	AWX8291	AWX8291
	2..MIC & F.OPT IN ASSY	AWX7981	AWX7981	AWX7981
	2..MIC AMP ASSY	AWX8004	AWX8004	AWX8004
	2..DSP CONNECTION ASSY	AWX8299	AWX8024	AWX8024
	2..FAN CONNECTION ASSY	AWX8005	AWX8005	AWX8005
NSP	1..POWER AMP ASSY	AWK7793	AWK7763	AWK7763
	2..DISPLAY ASSY	AWX8316	AWX8147	AWX8147
	2..POWER AMP-L ASSY	AWX7984	AWX7984	AWX7984
	2..POWER AMP-R ASSY	AWX7985	AWX7985	AWX7985
	2..POWER AMP-C ASSY	AWX7986	AWX7986	AWX7986
	1..DSP ASSY	AWX8249	AWX8249	AWX8249
	1..1394 ASSY	AWK7768	Not used	Not used

• CONTRAST OF PCB ASSEMBLIES

A 7.1CH I/O ASSY

AWX8306 and AWX7973 are constructed the same except for the following :

Mark	Symbol and Description	AWX8306	AWX7973
	1301–1304 4P PIN JACK	AKB7075	Not used
	CN1301–CN1304 4P PIN JACK	Not used	AKB7015

B V-AUDIO IN ASSY

AWX8314 and AWX7991 are constructed the same except for the following :

Mark	Symbol and Description	AWX8314	AWX7991
	1201–1203 4P PIN JACK	AKB7075	Not used
	CN1201–CN1203 4P PIN JACK	Not used	AKB7015

H COAXIAL IN ASSY

AWX8300 and AWX8323 are constructed the same except for the following :

Mark	Symbol and Description	AWX8300	AWX8323
	IC1681	PCM2902EG	Not used
	IC1682	TC7SET08F	Not used
	C1680, C1697	CKSRYB103K50	Not used
	C1681	CEAT470M16	Not used
	C1683-C1686, C1689, C1690, C1698	CKSRYB104K16	Not used
	C1687	CCSRCH220J50	Not used
	C1688	CCSRCH180J50	Not used
	R1681	RS1/16S152J	Not used
	R1682, R1683	RS1/16S220J	Not used
	R1686	RS1/16S105J	Not used
	R1687	RS1/16S470J	Not used
	R1689	RS1/16S222J	Not used
	R1690	RS1/16S101J	Not used
	X1681 CRYSTAL RESONATOR (12.0MHz)	ASS7047	Not used
	JA1681 USB CONNECTOR	DKN1237	Not used
	JA1802 2P PIN JACK	AKB7148	AKB7131

K VIDEO ASSY

AWX8312 and AWX8322 are constructed the same except for the following :

Mark	Symbol and Description	AWX8312	AWX8322
	C922	CCSRCH181J50	Not used
	R915	RS1/16S0R0J	Not used
	R922	RS1/16S750J	Not used
	JA901–JA903 COMB. JACK (2S+2P)	AKB7160	AKB7147
	JA904 COMB. JACK (S+1P)	AKB7159	AKB7146
	JA905 1P PIN JACK	VKB1156	Not used

L MAIN CONTROL ASSY

AWX8287 and AWX8291 are constructed the same except for the following :

Mark	Symbol and Description	AWX8287	AWX8291
	IC501	PD5948A8	PD5899A
	Q101, Q102	2SC3326	Not used
	Q103	DTA124EK	Not used
	C139, C140	CCSRCH470J50	Not used
	R135, R136	RS1/16S912J	RS1/16S0R0J
	R137, R138	RS1/16S102J	Not used
	R141, R142	RS1/16S472J	Not used
	R143	RS1/16S473J	Not used

Mark	Symbol and Description	AWX8287	AWX8291
	R331, R352–R354, R356	RS1/16S221J	Not used
	R351	RS1/16S0R0J	Not used
	R355	RS1/16S101J	Not used
	R357, R358	Not used	RS1/16S0R0J
	R523, R526	Not used	RS1/16S473J
	R524, R525	RS1/16S473J	Not used
	JA111–JA113 4P PIN JACK	VKB1133	VKB1132

O DSP CONNECTION ASSY

AWX8299 and AWX8024 are constructed the same except for the following :

Mark	Symbol and Description	AWX8299	AWX8024
	IC1653	TC74LVX244FT	Not used
	L1652	QTL1013	Not used
	C1653	CKSRYB104K16	Not used
	R1655	Not used	RS1/16S0R0J
	R1656, R1676, R1678	RS1/16S0R0J	Not used
	R1659, R1660, R1662	RS1/16S151J	Not used

U DISPLAY ASSY

AWX8316 and AWX8147 are constructed the same except for the following :

Mark	Symbol and Description	AWX8316	AWX8147
	D3010	UDZS6.2B	Not used
	D3011	NSPB500-0008	Not used
	R3064	RS1/16S222J	Not used

AC REGULATOR ASSY

AWX8305 and AWX8020 are constructed the same except for the following :

Mark	Symbol and Description	AWX8305	AWX8020
⚠	IC2410	NJM78L05A	Not used
⚠	Q2402	2SA1803	Not used
⚠	D2421, D2422	UDZS15B	UDZ15B
	C2401, C1402	ACH7191	CEAT332M35
	C2433	ACH7192	CEAT472M16
	C2437	CKSRYB103K50	Not used
	C2438	CEAT2R2M50	Not used
	R2402	RD1/4MUF470J	Not used
	R2408, R2409	RS1/16S100J	Not used

AD SP/PS ASSY

AWX8307 and AWX7975 are constructed the same except for the following :

Mark	Symbol and Description	AWX8307	AWX7975
⚠	C4621, C4622	ACH7190	ACH7169
	CN4611 SP TERMINAL 8-P	AKE7099	AKE7074
	CN4612 SP TERMINAL 6-P	AKE7100	AKE7075

• PARTS LIST FOR VSX-AX5i-S

Mark No. Description Part No.

REGULATOR ASSY [AWK7786]

OTHERS

Y15	BOARD IN JUMPER	ADX7418
Y14	BOARD IN JUMPER	ADX7419
J11	JUMPER WIRE 7P	D20PYY0745E

COMPLEX ASSY [AWK7790]

OTHERS

Y8	BOARD IN JUMPER	ADX7284
Y9	BOARD IN JUMPER	ADX7285
Y10	BOARD IN JUMPER	ADX7286
Y11	BOARD IN JUMPER	ADX7287
Y12	BOARD IN JUMPER	ADX7288
J9	JUMPER WIRE 6P	D20PYY0615E

A 7.1 CH I/O ASSY [AWX8306]

SEMICONDUCTORS

IC1301-IC1304		UPC4570G2
Q1351, Q1352, Q1361, Q1362		HN1C03F
Q1371, Q1372, Q1381, Q1382		HN1C03F

CAPACITORS

C1301-C1304, C1307, C1308		CCSRCH101J50
C1311-C1314, C1317, C1318		CCSRCH101J50
C1321-C1324, C1327, C1328		CCSRCH101J50
C1331-C1334, C1337, C1338		CCSRCH101J50
C1351, C1352, C1361, C1362		CCSRCH331J50
C1371, C1372, C1381, C1382		CCSRCH331J50
C1309, C1310, C1319, C1320		CEAT100M50
C1329, C1330, C1339, C1340		CEAT100M50
C1305, C1306, C1315, C1316		CEAT4R7M50
C1325, C1326, C1335, C1336		CEAT4R7M50
C1341-C1348, C1391-C1394		CKSRYB103K50

RESISTORS

All Resistors		RS1/16S###J

OTHERS

1301-1304	4P PIN JACK	AKB7075
CN1306	5P SOCKET	AKP7066
CN1307,CN1308	9P SOCKET	AKP7068

B V-AUDIO IN ASSY [AWX8314]

CAPACITORS

C1201-C1212		CCSRCH221J50
C1213-C1215		CKSRYB103K50

RESISTORS

All Resistors		RS1/16S###J

OTHERS

1201-1203	4P PIN JACK	AKB7075
CN1204	17P SOCKET	AKP7072

C FRONT IN ASSY [AWX8186]

Mark No. Description Part No.

CAPACITORS

C1501, C1502		CCSRCH221J50
C1505		CKSRYB102K50
C1504, C1506		CKSRYB103K50
C1503		CKSRYB472K50
C1510		CKSRYB473K50

RESISTORS

All Resistors		RS1/16S###J

OTHERS

CN1501	7P FFC CONNECTOR	52044-0745
JA1501	FRONT INPUT	AKX7016
KN1501	EARTH METAL FITTING	VNF1084

D OPTICAL IN ASSY [AWX7978]

COILS AND FILTERS

F1701	CHIP BEAD	DTF1064

CAPACITORS

C1706		CEAT470M16
C1701-C1705		CKSRYF104Z16

RESISTORS

All Resistors		RS1/16S###J

OTHERS

CN1701	9P FFC CONNECTOR	52045-0945
JA1701,JA1702	OPTICAL LINK IN	GP1FA502RZ
JA1703,JA1704	OPTICAL LINK OUT	GP1FA502TZ

E INPUT CONNECT ASSY [AWX8041]

SEMICONDUCTORS

IC1451		UPC4570G2

CAPACITORS

C1451, C1452		CEAT100M50
C1454, C1455		CKSRYB103K50
C1453		CKSRYB472K50

RESISTORS

All Resistors		RS1/16S###J

OTHERS

CN1407	5P PLUG	AKP7055
CN1406,CN1408	9P PLUG	AKP7057
CN1405	17P PLUG	AKP7061
CN1404	9P SOCKET	AKP7068
CN1403	13P SOCKET	AKP7070
CN1401	15P SOCKET	AKP7071

H COAXIAL IN ASSY [AWX8300]

SEMICONDUCTORS

IC1681		PCM2902EG
IC1881		TC74HCU04AF
IC1682		TC7SET08F

COILS AND FILTERS

F1881	CHIP BEAD	DTF1064

CAPACITORS

Mark	No.	Description	Part No.
	C1688		CCSRCH180J50
	C1687		CCSRCH220J50
	C1885, C1886		CCSRCH470J50
	C1887, C1896		CCSRCH471J50
	C1681		CEAT470M16
	C1890		CEAT470M25
	C1680, C1697, C1857, C1858		CKSRYB103K50
	C1883, C1884, C1888, C1897		CKSRYB103K50
	C1683-C1686, C1689, C1690, C1698		CKSRYB104K16
	C1889		CKSRYB105K6R3

RESISTORS

	All Resistors		RS1/16S###J

OTHERS

	CN1801	19P FFC CONNECTOR	52045-0945
	JA1802	2P PIN JACK	AKB7148
	CN1803	9P SOCKET	AKP7068
	JA1681	USB CONNECTOR	DKN1237
	CN1802	20P FFC CONNECTOR	VKN1196
	X1681	CRYSTAL RESONATOR (12.0MHz)	ASS7047

I COMPONENT ASSY [AWX8293] for VSX-AX5i-S

SEMICONDUCTORS

	IC1051		PDC084A
	IC1001, IC1052		TC74HC4053AF
	IC1002, IC1003		TK15450M
	Q1051, Q1052		DTC124EK
	D1051, D1052		1SS355

COILS AND FILTERS

	L1051, L1052		LCYA100J2520
	L1053		LCYA330J2520

CAPACITORS

	C1060		CCSRCH101J50
	C1055		CCSRCH150J50
	C1056		CCSRCH180J50
	C1057, C1058		CCSRCH240J50
	C1024-C1026, C1059		CCSRCH470J50
	C1017, C1018, C1023, C1029		CCSRCK2R0C50
	C1013, C1014, C1019, C1020		CEAT101M16
	C1027,C1028,C1051,C1053,C1063		CEAT101M16
	C1007, C1008, C1015, C1016		CKSRYB103K50
	C1021, C1022, C1065, C1066		CKSRYB103K50
	C1052, C1054, C1061, C1062		CKSRYB473K50

RESISTORS

	All Resistors		RS1/16S###J

OTHERS

	CN1001	9P SOCKET	AKP7068
	JA1001-JA1003	3P PIN JACK	VKB1151
	X1051	CRYSTAL RESONATOR (14.32MHz)	ASS1056

I COMPONENT ASSY [AWX8296] for VSX-AX3-S, -K

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC1051		PDC084A
	Q1051		DTC124EK
	D1051, D1052		1SS355

COILS AND FILTERS

	L1051, L1052		LCYA100J2520
	L1053		LCYA330J2520

CAPACITORS

	C1060		CCSRCH101J50
	C1055		CCSRCH150J50
	C1056		CCSRCH180J50
	C1057, C1058		CCSRCH240J50
	C1059		CCSRCH470J50
	C1051, C1053, C1063		CEAT101M16
	C1052, C1054, C1061, C1062		CKSRYB473K50

RESISTORS

	All Resistors		RS1/16S###J

OTHERS

	CN1001	9P SOCKET	AKP7068
	1001	SCREW PLATE	VNE1948
	X1051	CRYSTAL RESONATOR (14.32MHz)	ASS1056

K VIDEO ASSY [AWX8312]

SEMICONDUCTORS

	IC933		BU4053BCF
	IC901, IC931		NJM2296M
	IC932		NJM2596M
	IC903		TC4W53FU
	Q901, Q931, Q932		2SA933S
	Q933		IMZ1A
	D901		DAN202K

CAPACITORS

	C981–C983		CCSRCH101J50
	C919, C960, C963		CCSRCH150J50
	C922–C925, C969–C974		CCSRCH181J50
	C955		CCSRCH330J50
	C901–C904, C932, C935, C938		CEAT101M10
	C941		CEAT101M10
	C905, C906, C918, C945, C946		CEAT101M16
	C951, C952, C959		CEAT101M16
	C933, C936, C939, C942		CEAT1R0M50
	C920, C961, C964		CEAT470M25
	C943		CKSRYB103K50
	C931, C934, C937, C940, C944		CKSRYB104K16
	C966–C968		CKSRYB104K16
	C907, C908, C915, C916, C921		CKSRYB473K50
	C947, C948, C953, C954		CKSRYB473K50
	C957, C958, C962, C965		CKSRYB473K50

RESISTORS

	R920, R966		RD1/2VM221J
	R969		RD1/2VM471J
	Other Resistors		RS1/16S###J

OTHERS

	JA904	COMB. JACK (S+1P)	AKB7159
	JA901–JA903	COMB. JACK (2S+2P)	AKB7160
	CN901	15P SOCKET	AKP7071

Mark	No.	Description	Part No.
	JA905	1P PIN JACK	VKB1156

L MAIN CONTROL ASSY [AWX8287]

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC651		BU1923F
	IC502, IC503		BU4094BCF
	IC501		PD5948A8
	IC511		TC74VHC08FT
	IC302		TC74VHCT244AFT
	IC103		TC9163AF
	IC104		TC9215AF
	IC101		TC9274F-019
	IC701–IC704		TC94A07F
	IC102, IC711–IC714		UPC4570G2
	Q651		2SA1037K
	Q601		2SC1740S
	Q653		2SC2412K
	Q101, Q102		2SC3326
	Q103, Q511		DTA124EK
	Q501, Q652		DTC143EK
	D501, D511, D521–D524		1SS355
	D821, D822, D831, D832		1SS355
	D601		UDZS11B

COILS AND FILTERS

Mark	No.	Description	Part No.
	L501		LCYA2R2J2520
	L651		LFCA2R2J
⚠	L891–L895	CHIP SOLID INDUCTOR	QTL1013

CAPACITORS

Mark	No.	Description	Part No.
	C508	EDL CAPACITOR	ACH7132
	C113, C114, C125–C127		CCSRCH101J50
	C151–C153, C725–C727		CCSRCH101J50
	C745–C747, C765–C767		CCSRCH101J50
	C785–C787		CCSRCH101J50
	C103–C112, C115, C116		CCSRCH221J50
	C651, C652		CCSRCH270J50
	C117, C118, C139, C140, C662		CCSRCH470J50
	C719, C720, C739, C740		CCSRCH680J50
	C759, C760, C779, C780		CCSRCH680J50
	C131, C132, C621, C622		CEAT100M50
	C701, C702, C713, C714		CEAT100M50
	C733, C734, C753, C754		CEAT100M50
	C773, C774		CEAT100M50
	C654		CEAT101M10
	C303, C304, C602		CEAT101M16
	C657		CEAT1R0M50
	C506, C513		CEAT221M10
	C505, C655		CEAT2R2M50
	C503		CEAT331M10
	C717, C718, C721, C722		CEAT470M25
	C737, C738, C741, C742		CEAT470M25
	C757, C758, C761, C762		CEAT470M25
	C777, C778, C781, C782		CEAT470M25
	C133, C134		CEAT470M50
	C511		CEAT471M10
	C748, C749, C768, C769		CEV100M16
	C788, C789		CEV100M16
	C510		CKSQYF105Z16
	C601		CKSQYF225Z16

Mark	No.	Description	Part No.
	C653		CKSRYB102K50
	C128, C129, C137, C138		CKSRYB103K50
	C155–C157, C302, C502, C507		CKSRYB103K50
	C509, C514, C515, C535, C540		CKSRYB103K50
	C598, C711, C712, C723, C724		CKSRYB103K50
	C731, C732, C743, C744		CKSRYB103K50
	C751, C752, C763, C764		CKSRYB103K50
	C771, C772, C783, C784		CKSRYB103K50
	C891, C892		CKSRYB103K50
	C512, C656		CKSRYB472K50
	C154, C599, C821, C831		CKSRYB473K50
	C658		CKSRYB561K50

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

OTHERS

Mark	No.	Description	Part No.
	CN552	10P FFC CONNECTOR	52045-1045
	CN601	13P FFC CONNECTOR	52045-1345
	CN801	24P FFC CONNECTOR	52045-2445
	CN501	32P FFC CONNECTOR	52045-3245
	CN103	9P PLUG	AKP7057
	CN102	13P PLUG	AKP7059
	CN101	15P PLUG	AKP7060
	CN351	7P SOCKET	AKP7067
	CN2, CN3	9P SOCKET	AKP7068
	CN502	19P SOCKET	AKP7073
	CN302	21P SOCKET	AKP7074
	CN1	3P PLUG	KM250NA3L
	JA591	REMOTE CONTROL JACK	RKN1004
	JA592	REMOTE CONTROL JACK	RKN1026
	JA111–JA113	4P PIN JACK	VKB1133
	CN301	21P FFC CONNECTOR	VKN1197
	X651	CERAMIC RESONATOR (4.332MHz)	ASS7004
	X501	CERAMIC RESONATOR (15.7MHz)	ASS7032

M MIC & F.OPT IN ASSY [AWX7981]

COILS AND FILTERS

Mark	No.	Description	Part No.
	L1601	CHIP FERRITE BEAD	ATL7002
⚠	L1602, L1603	CHIP SOLID INDUCTOR	QTL1013

CAPACITORS

Mark	No.	Description	Part No.
	C1601, C1606		CCSRCH471J50
	C1603		CEAL470M16
	C1611		CKSRYB102K50
	C1602, C1612, C1614		CKSRYB103K50

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

OTHERS

Mark	No.	Description	Part No.
	CN1601	4P FFC CONNECTOR	52044-0445
	J1601	CORD WITH PLUG	ADX7417
	JA1601	OPTICAL LINK IN	GP1FA502RZ
	JA1606	REMOTE CONTROL JACK	RKN1004
	CN1602	KR CONNECTOR	S3B-PH-K

N MIC AMP ASSY [AWX8004]

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC4751		NJM78L05A
	IC4752		UPC4570G2
	D4751, D4752		UDZS5.1B

CAPACITORS

Mark	No.	Description	Part No.
	C4753		CCSRCH101J50
	C4754		CCSRCH330J50
	C4751, C4752, C4755-C4757		CEAT100M50
	C4758, C4762-C4765		CKSRYB473K50

RESISTORS

Mark	No.	Description	Part No.
	R4756		RD1/4MUF471J
	Other Resistors		RS1/16S###J

OTHERS

Mark	No.	Description	Part No.
	CN4752	4P JUMPER CONNECTOR	52147-0410
	CN4751	KR CONNECTOR	B3B-PH-K
		PCB BINDER	VEF1040
	KN4751	EARTH METAL FITTING	VNF1084

O DSP CONNECTION ASSY [AWX8299]

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC1651, IC1653		TC74LVX244FT

COILS AND FILTERS

Mark	No.	Description	Part No.
	L1651, L1652		QTL1013

CAPACITORS

Mark	No.	Description	Part No.
	C1651		CKSRYB103K50
	C1653		CKSRYB104K16

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

OTHERS

Mark	No.	Description	Part No.
	CN1652-CN1654	17P SOCKET	AKP7072
	CN1651	B TO B CONNECTOR 50P	AKP7177

P POWER AMP IN ASSY [AWX7982]

SEMICONDUCTORS

Mark	No.	Description	Part No.
	Q4001		2SC2412K
	D4001		1SS355

CAPACITORS

Mark	No.	Description	Part No.
	C4002		CKSRYB104K16
	C4001		CKSRYB223K50

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

OTHERS

Mark	No.	Description	Part No.
	4001	10P CABLE HOLDER	51048-1000
	CN4001	24P FFC CONNECTOR	52044-2445
	CN4003	17P PLUG	AKP7061
	CN4002	19P PLUG	AKP7062
	J12	JUMPER WIRE 10P	D20PYY1010E
	CN4004	3P L TYPE PLUG	KM250MA3L

Q FAN CONNECTION ASSY [AWX8005]

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC4701, IC4702	PROTECTOR(200mA)	AEK7023

OTHERS

Mark	No.	Description	Part No.
	4701	9P CABLE HOLDER	51048-0900
	CN4701	6P JUMPER CONNECTOR	52147-0610
	J4701	JUMPER WIRE 9P	D20PYY0915E
	CN4702	3P PLUG	KM250MA3

R FAN DRIVE ASSY [AWX8135]

SEMICONDUCTORS

Mark	No.	Description	Part No.
	Q4056		2SA1037K
	Q4051		2SC4793D1
	Q4052		DTA124EK
	Q4055		DTC114EK
	Q4053		DTC124EK
⚠	D4051, D4052		1SR154-400
	D4058, D4059		1SS355
	D4055		UDZS12B
	D4053		UDZS27B
	D4057		UDZS5.1B

CAPACITORS

Mark	No.	Description	Part No.
	C4054		CEAT101M16
	C4052		CEAT1R0M50
	C4055, C4056		CEAT331M63
	C4051		CEAT471M35
	C4053		CKSRYB103K50

RESISTORS

Mark	No.	Description	Part No.
	All Resistors		RS1/16S###J

OTHERS

Mark	No.	Description	Part No.
	CN4051	9P JUMPER CONNECTOR	52147-0910
	CN4054	10P JUMPER CONNECTOR	52147-1010

S DSP ASSY [AWX8249]

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC201		AK4114VQ
	IC561		AK4382AVT
	IC501, IC521, IC541		AK4383VT
	IC101		AK5380VT
	IC301, IC401		DSPC56367PV150
	IC451		IC61LV25616-12T
	IC302		IC61LV6416-12T
	IC303		IC63LV1024-12T
⚠	IC901		NJM2391DL1-33
	IC601, IC621, IC641, IC661, IC681		NJM4565MD
⚠	IC902		NJU7223DL1-18
	IC471		PD8118A
	IC701		TC74VHC157FT
	IC304		TC74VHCU04FT
	IC503, IC705, IC706		TC7SH04FU
	IC305		TC7WH125FU
	Q681, Q682		2SK208
	Q683, Q701, Q971, Q972, Q974		UN5112
	Q684, Q702, Q973		UN5212
	Q601, Q621, Q641, Q661		XP4506
	D681, D682, D721		1SS355
	D702		DAN202K
	D701, D971, D972		DAP202K
	D101–D104		RB501V-40

Mark No.	Description	Part No.

COILS AND FILTERS

Mark No.	Description	Part No.
L301–L304, L401, L402, L451		ATL7002
L471, L904, L906, L907		ATL7002
	CHIP FERRITE BEAD	
L101–L104, L201–L203		QTL1013
L305, L306, L501, L503, L511		QTL1013
L521, L531, L541, L551, L561		QTL1013
L571, L701, L705, L706		QTL1013
	CHIP SOLID INDUCTOR	

CAPACITORS

Mark No.	Description	Part No.
C339, C340		CCSRCH100D50
C202		CCSRCH150J50
C623, C625, C643–C646		CCSRCH151J50
C663–C666		CCSRCH151J50
C201		CCSRCH220J50
C204, C206, C209, C301, C302		CCSRCH471J50
C304, C306, C308, C309, C312		CCSRCH471J50
C314, C316, C318, C319		CCSRCH471J50
C321, C322, C325, C326		CCSRCH471J50
C329, C330, C332, C333, C335		CCSRCH471J50
C345, C346, C402, C404–C408		CCSRCH471J50
C410–C418, C420–C422		CCSRCH471J50
C424–C426, C471		CCSRCH471J50
C603–C606		CCSRCH820J50
C111, C112, C502, C522, C542		CEV100M16
C562, C607, C608, C627, C628		CEV100M16
C647, C648, C667, C668		CEV100M16
C681, C682		CEV100M16
C104, C105, C551, C907, C909		CEV101M16
C106		CEV2R2M50
C901, C902		CEV330M25
C210, C341, C401		CEV470M6R3
C212, C614, C618, C624, C626		CKSRYB102K50
C683–C685, C689, C693, C695		CKSRYB102K50
C927		CKSRYB102K50
C337, C343, C349, C429, C503		CKSRYB103K50
C619, C620, C677, C678, C701		CKSRYB103K50
C711–C716, C747, C921, C922		CKSRYB103K50
C941		CKSRYB103K50
C101–C103, C205, C207, C208		CKSRYB104K16
C211, C305, C307, C310, C311		CKSRYB104K16
C313, C315, C324, C331, C334		CKSRYB104K16
C352, C409, C419, C423, C427		CKSRYB104K16
C451, C452, C501, C521, C541		CKSRYB104K16
C561, C591, C630, C705, C706		CKSRYB104K16
C906, C908		CKSRYB104K16
C303, C338, C348, C403, C599		CKSRYB105K6R3
C702		CKSRYB105K6R3
C109, C110, C622		CKSRYB222K50
C601, C602, C609, C610		CKSRYB332K50
C621, C641, C642, C661, C662		CKSRYB392K50
C629, C649, C650, C669, C670		CKSRYB472K50
C971		CKSRYB472K50
C926		CKSRYB473K16
C203		CKSRYB474K10
C323, C428		CKSRYB563K16
C107, C611–C613, C615		CKSRYF104Z25
C671, C672, C694, C696–C698		CKSRYF104Z25

Mark No.	Description	Part No.

RESISTORS

Mark No.	Description	Part No.
R851		RAB4C101J
R204, R225, R226, R229, R701		RAB4C104J
R712		RAB4C104J
R221		RS1/16S1802F
Other Resistors		RS1/16S###J

OTHERS

Mark No.	Description	Part No.
CN102	B TO B CONNECTOR 50P	AKP7176
X201	CRYSTAL RESONATOR (24MHz)	ASS7025
X301	CRYSTAL RESONATOR (33MHz)	ASS7040
CN702	10P FFC CONNECTOR	VKN1414
CN101	20P FFC CONNECTOR	VKN1424
CN601	21P FFC CONNECTOR	VKN1425
CN701	22P FFC CONNECTOR	VKN1426
KN931	EARTH METAL FITTING	VNF1109

T 1394 ASSY [AWK7768]

SEMICONDUCTORS

Mark No.	Description	Part No.
IC302		K4S641632F-TC75
⚠ IC1		NJM2391DL1-33
IC303		NJU7093AF
IC101		PD5787A
IC301		PD8112A
IC103		PST9245
IC401		SM5816AF
IC405		TC74VHC541FT
IC104		TC74VHCT125AFT
IC205		TC7SH08FU
IC409		TC7SZ126FU
IC201		TSB43CA42GGW
Q101, Q301		DTA124EUA
Q401		DTA143EUA
D102		RB501V-40

COILS AND FILTERS

Mark No.	Description	Part No.
L1, L101, L201–L203		ATL7002
L301, L302, L401, L403		ATL7002
	CHIP FERRITE BEAD	
⚠ L204–L207	COIL	VTH1043

CAPACITORS

Mark No.	Description	Part No.
C329	(10u/6.3V)	ACG7046
C2, C401	(220u/6.3V)	ACH7195
C242, C243		CCSRCH221J50
C402		CCSRCH471J50
C419		CEV101M16
C103, C206, C217, C232, C304		CEVL101M6R3
C321		CEVL101M6R3
C113, C211, C213, C215, C216		CKSRYB102K50
C310, C324		CKSRYB102K50
C101, C111		CKSRYB103K50
C1, C102, C104–C110		CKSRYB104K16
C201–C205, C207, C209, C210		CKSRYB104K16
C212, C214, C218–C226, C235		CKSRYB104K16
C241, C246–C249, C301–C303		CKSRYB104K16
C305, C309, C311, C315–C320		CKSRYB104K16
C322, C323, C325, C327, C333		CKSRYB104K16
C404, C405, C408–C412, C416		CKSRYB104K16
C420, C424		CKSRYB104K16
C244, C245, C326		CKSRYB105K6R3

Mark No.	Description	Part No.
C330		CKSRYB472K50
C328		CKSRYB474K10

RESISTORS

Mark No.	Description	Part No.
R119, R127–R130, R205		RAB4C101J
R230–R233, R245, R246, R445		RAB4C101J
R122		RAB4C103J
R407		RAB4C221J
R308, R339, R340, R343–R347		RAB4C470J
R350		RAB4C470J
R135–R138, R206, R216		RAB4C472J
R220, R221, R223, R234		RAB4C472J
R238–R240		RAB4C472J
R302, R402		RAB4C680J
R275, R276		RS1/16S5101F
R267–R274		RS1/16S56R0D
R213		RS1/16S6341D
Other Resistors		RS1/16S###J

OTHERS

Mark No.	Description	Part No.
CN101	7P CONNECTOR	RKN1048
CN402	10P CONNECTOR	VKN1414
CN401	22P CONNECTOR	VKN1426
JA201, JA202	1394-TERMINAL	VKN1800
X302	CRYSTAL RESONATOR (22.5792MHz)	ASS7054
X201	CRYSTAL RESONATOR (24.5760MHz)	ASS7055
X101	CERAMIC RESONATOR (6.14MHz)	VSS1179

U DISPLAY ASSY [AWX8316]

SEMICONDUCTORS

Mark No.	Description	Part No.
IC3000		PD5771B
IC3002		RPM7140-H4
Q3003		2SA1037K
Q3002		DTC124EK
Q3004		HN1C01FU
D3006-D3008		1SS355
D3001		BR5064X
D3009		DAN202K
D3000		MAA5064X
D3011		NSPB500-0008
D3010		UDZS6.2B

COILS AND FILTERS

Mark No.	Description	Part No.
L3000	CHIP FERRITE BEAD	ATL7002

SWITCHES AND RELAYS

Mark No.	Description	Part No.
S3000-S3017		ASG7013

CAPACITORS

Mark No.	Description	Part No.
C3003, C3004, C3007, C3024, C3025		CCSRCH101J50
C3020, C3021, C3026, C3027		CEJQ100M16
C3028, C3029		CEJQ101M10
C3008, C3012, C3035		CEJQ101M6R3
C3022, C3023		CEJQ330M25
C3000-C3002		CKSRYB102K50
C3009, C3011, C3032-C3034		CKSRYB103K50
C3036, C3037		CKSRYB103K50
C3006, C3031		CKSRYB104K16
C3030		CKSRYF104Z50

RESISTORS

Mark No.	Description	Part No.
All Resistors		RS1/16S###J

OTHERS

Mark No.	Description	Part No.
3008	4P CABLE HOLDER	51048-0400
3002	5P CABLE HOLDER	51048-0500
3003	7P CABLE HOLDER	51048-0700
CN3007	3P FFC CONNECTOR	52045-0345
CN3004	4P FFC CONNECTOR	52045-0445
CN3005	7P FFC CONNECTOR	52045-0745
CN3001	11P FFC CONNECTOR	52045-1145
CN3006	32P FFC CONNECTOR	52045-3245
V3000	FL TUBE	AAV7087
J3008	JUMPER WIRE 4P	D20PYY0415E
J3002	JUMPER WIRE 5P	D20PYY0510E
J3003	JUMPER WIRE 7P	D20PYY0715E
3001	FL HOLDER	VNF1085
X3000	CERAMIC RESONATOR (4.19MHz)	ASS7042

V VOLUME ASSY [AWX7971]

SWITCHES AND RELAYS

Mark No.	Description	Part No.
S3402-S3404		ASG7013
S3401		ASX7037

CAPACITORS

Mark No.	Description	Part No.
C3401, C3402		CKSRYB103K50

RESISTORS

Mark No.	Description	Part No.
All Resistors		RS1/16S###J

OTHERS

Mark No.	Description	Part No.
CN3401	5P JUMPER CONNECTOR	52147-0510

W MECHA SW ASSY [AWX7995]

SWITCHES AND RELAYS

Mark No.	Description	Part No.
S2491		ASG1035

CAPACITORS

Mark No.	Description	Part No.
C2491, C2492		CKSRYB103K50

OTHERS

Mark No.	Description	Part No.
CN2491	3P JUMPER CONNECTOR	52147-0310

X MULTI JOG ASSY [AWX8015]

SWITCHES AND RELAYS

Mark No.	Description	Part No.
S3452-S3455		ASG7013
S3451		ASX7038

CAPACITORS

Mark No.	Description	Part No.
C3451, C3452		CKSRYB103K50

RESISTORS

Mark No.	Description	Part No.
All Resistors		RS1/16S###J

OTHERS

Mark No.	Description	Part No.
3452	3P CABLE HOLDER	51048-0300
CN3451	7P JUMPER CONNECTOR	52147-0710
J3452	JUMPER WIRE	D20PYY0310E

Mark No. Description Part No.

Y HEADPHONE ASSY [AWX7980]

CAPACITORS

	C1951, C1952	CKSRYB392K50

RESISTORS

	All Resistors	RS1/16S###J

OTHERS

	CN1951 3P FFC CONNECTOR	52045-0345
	1951 PHONE JACK	AKN7029
	KN1951 EARTH METAL FITTING	VNF1084

Z POWER AMP-L ASSY [AWX7984]

SEMICONDUCTORS

⚠	IC4101, IC4201, IC4301	PA9009A
⚠	IC4102, IC4202, IC4302	PBD001A
⚠	IC4103, IC4203, IC4303, IC4453	PBD002A
	Q4102, Q4202, Q4302	2SA1255
	Q4101, Q4201, Q4301	2SC3326
	D4102, D4104-D4107, D4202	1SS355
	D4204-D4207, D4302, D4304-D4307	1SS355
	D4101, D4103, D4201, D4203, D4301	UDZS10B
	D4303	UDZS10B

CAPACITORS

	C4106, C4107, C4206, C4207	ACG7041
	C4306,C4307 (220u/100V)	ACG7041
	C4102, C4202, C4302	CCSRCH331J50
	C4112, C4113, C4212, C4213	CCSRCH6R0D50
	C4312, C4313	CCSRCH6R0D50
	C4114, C4214, C4314	CEANP1R0M50
	C4401, C4402	CEAT331M63
	C4110, C4111, C4210, C4211	CEHAT100M2A
	C4310, C4311	CEHAT100M2A
	C4101, C4201, C4301	CEHAT100M50
	C4103, C4203, C4303	CEHAT331M10
	C4104, C4105, C4204, C4205	CEHAT470M63
	C4304, C4305	CEHAT470M63
	C4108, C4109, C4208, C4209	CEHAZL470M25
	C4308, C4309	CEHAZL470M25

RESISTORS

⚠	R4131, R4132, R4231, R4232	ACN7107
⚠	R4331,R4332,R4482 (0.1ohm)	ACN7107
⚠	R4119,R4219,R4319 (0.22ohm/5W)	ACN7121
	R4112, R4212, R4312	RN1/10SE3302D
	Other Resistors	RS1/16S###J

OTHERS

	Y2 LEAD WITH HOUSING	ADX7398
	Y3 LEAD WITH HOUSING	ADX7399
	Y5 LEAD WITH HOUSING	ADX7404
	CN4401 17P SOCKET	AKP7072
	CN4403 3P L TYPE PLUG	KM250MA3
	CN4456 10P PLUG	KM250NA10L
	KN4401,KN4402 EARTH METAL FITTING	VNF1084

AA POWER AMP-R ASSY [AWX7985]

SEMICONDUCTORS

Mark No. Description Part No.

⚠	IC4151, IC4251, IC4351	PA9009A
⚠	IC4152, IC4252, IC4352, IC4452	PBD001A
⚠	IC4153, IC4253, IC4353	PBD002A
	Q4152, Q4252, Q4352	2SA1255
	Q4403, Q4404	2SC2412K
	Q4151, Q4251, Q4351	2SC3326
	D4152, D4154-D4157, D4252	1SS355
	D4254-D4257, D4352, D4354-D4357	1SS355
	D4151, D4153, D4251, D4253, D4351	UDZS10B
	D4353	UDZS10B

CAPACITORS

	C4156, C4157, C4256, C4257	ACG7041
	C4356,C4357 (220u/100V)	ACG7041
	C4152, C4252, C4352	CCSRCH331J50
	C4162, C4163, C4262, C4263	CCSRCH6R0D50
	C4362, C4363	CCSRCH6R0D50
	C4164, C4264, C4364	CEANP1R0M50
	C4405	CEAT331M10
	C4403, C4404	CEAT331M63
	C4160, C4161, C4260, C4261	CEHAT100M2A
	C4360, C4361	CEHAT100M2A
	C4151, C4251, C4351	CEHAT100M50
	C4153, C4253, C4353	CEHAT331M10
	C4154, C4155, C4254, C4255	CEHAT470M63
	C4354, C4355	CEHAT470M63
	C4158, C4159, C4258, C4259	CEHAZL470M25
	C4358, C4359	CEHAZL470M25

RESISTORS

⚠	R4181, R4182, R4281, R4282	ACN7107
⚠	R4381,R4382,R4481 (0.1ohm)	ACN7107
⚠	R4169,R4269,R4369 (0.22ohm/5W)	ACN7121
	R4162, R4262, R4362	RN1/10SE3302D
	Other Resistors	RS1/16S###J

OTHERS

	Y1 LEAD WITH HOUSING	ADX7397
	Y4 LEAD WITH HOUSING	ADX7400
	Y6 LEAD WITH HOUSING	ADX7404
	CN4402 19P SOCKET	AKP7073
	CN4454 10P PLUG	KM250NA10L
	KN4403,KN4404 EARTH METAL FITTING	VNF1084

AB POWER AMP-C ASSY [AWX7986]

SEMICONDUCTORS

⚠	IC4451	PA9009A
	Q4452	2SA1255
	Q4451	2SC3326
	D4452, D4454-D4457	1SS355
	D4451, D4453	UDZS10B

CAPACITORS

	C4456,C4457 (220u/100V)	ACG7041
	C4452	CCSRCH331J50
	C4462, C4463	CCSRCH6R0D50
	C4464	CEANP1R0M50
	C4460, C4461	CEHAT100M2A
	C4451	CEHAT100M50
	C4453	CEHAT331M10
	C4454, C4455	CEHAT470M63
	C4458, C4459	CEHAZL470M25

Mark	No. Description	Part No.

RESISTORS

Mark	No. Description	Part No.
⚠	R4469 (0.22ohm/5W)	ACN7121
	R4462	RN1/10SE3302D
	Other Resistors	RS1/16S###J

OTHERS

Mark	No. Description	Part No.
	CN4453,CN4455 10P SOCKET	KP250NA10

AC REGULATOR ASSY [AWX8305]

SEMICONDUCTORS

Mark	No. Description	Part No.
⚠	IC2411 PROTECTOR(315mA)	AEK7003
⚠	IC2409	NJM78L05A
	IC2410	NJM78L05A
⚠	IC2404	NJM78M05FA
⚠	IC2403	NJM78M12FA
⚠	IC2401	NJM78M15FA
⚠	IC2405, IC2407	NJM78M56FA
⚠	IC2406	NJM79M05FA
⚠	IC2402	NJM79M15FA
⚠	Q2401	2SA1803
	Q2402	2SA1803
⚠	D2401-D2404, D2407-D2410	1SR154-400
⚠	D2418, D2419	1SR154-400
	D2411	1SS355
⚠	D2415	D3SBA20(B)
	D2405, D2406, D2413, D2414	RB501V-40
	D2420	UDZS10B
	D2421, D2422	UDZS15B
	D2423, D2424	UDZS6.2B

CAPACITORS

Mark	No. Description	Part No.
	C2401,C2402 (3300u/35V)	ACH7191
	C2433 (4700u/16V)	ACH7192
	C2446	CCSRCH101J50
	C2440	CEANP470M35
	C2415, C2416	CEAT101M16
	C2408	CEAT101M25
	C2405, C2406, C2410, C2429	CEAT221M35
	C2411, C2412	CEAT222M16
	C2435, C2438	CEAT2R2M50
	C2443	CEAT331M10
	C2442	CEAT470M50
	C2441	CEAT470M63
	C2436, C2439	CEAT471M16
	C2451, C2452	CKSRYB102K50
	C2403, C2404, C2407, C2409	CKSRYB103K50
	C2413, C2414, C2428, C2434, C2437	CKSRYB103K50
	C2453, C2499	CKSRYB103K50
	C2424	CKSRYB473K50
	C2444	CQMBA104J50

RESISTORS

Mark	No. Description	Part No.
	R2403	RD1/4MUF121J
	R2401, R2402	RD1/4MUF470J
	Other Resistors	RS1/16S###J

OTHERS

Mark	No. Description	Part No.
	2402 7P CABLE HOLDER	51048-0700
	CN2401 8P JUMPER CONNECTOR	52147-0810
	Y2401 BOARD IN JUMPER	ADX7420
	CN2411 7P PLUG	AKP7056
	CN2404,CN2406,CN2412,CN2414 9P PLUG	AKP7057
	CN2405 15P PLUG	AKP7060
	CN2407-CN2409 17P PLUG	AKP7061
	CN2413 19P PLUG	AKP7062
	CN2410 21P PLUG	AKP7063
	CN2415 3P SOCKET	KP250NA3
	KN2401-KN2403 EARTH METAL FITTING	VNF1084

AD SP/PS ASSY [AWX8308]

SEMICONDUCTORS

Mark	No. Description	Part No.
	Q4602, Q4603	RN1903
	Q4601	RN4903
	D4601-D4610	1SS355

COILS AND FILTERS

Mark	No. Description	Part No.
	L4601-L4607 AF CHOKE COIL	ATH1053
	L4608,L4609 NOISE FILTER	RTF1167

SWITCHES AND RELAYS

Mark	No. Description	Part No.
	RY4601-RY4605	ASR7014

CAPACITORS

Mark	No. Description	Part No.
⚠	C4621,C4622 (22000u/63V)	ACH7190
	C4623	CEAT101M50
	C4601-C4614	CFTYA224J50
	C4625-C4631	CQMBA103J50

RESISTORS

Mark	No. Description	Part No.
⚠	R4621-R4627	RD1/2LMF4R7J
	R4628-R4632	RD1/2VM331J
	R4615, R4616	RD1/4MUF473J
⚠	R4613, R4614	RS1LMF471J
⚠	R4601-R4607	RS1LMF4R7J
⚠	R4611, R4612	RS2LMF331J
	Other Resistors	RS1/16S###J

OTHERS

Mark	No. Description	Part No.
	4601 6P CABLE HOLDER	51048-0600
	4602 8P CABLE HOLDER	51048-0800
	Y13 BOARD IN JUMPER	ADX7291
	CN4611 SP TERMINAL 8-P	AKE7099
	CN4612 SP TERMINAL 6-P	AKE7100
	J4602 JUMPER WIRE 8P	D20PYY0830E
	CN4610,CN4613 5P PLUG	KM200TA5

AE DIODE ASSY [AWX8017]

SEMICONDUCTORS

Mark	No. Description	Part No.
⚠	D2241, D2242	LN6SB60-4003

AF TRANS 2-1 ASSY [AWX8326]

SEMICONDUCTORS

Mark	No. Description	Part No.
⚠	IC2201,IC2202 PROTECTOR(3.15A)	AEK7016
	Q2202	RN4903
	Q2201	UN521L
⚠	D2201	S1WB(A)60SD
	D2202	UDZS16B
	D2207, D2208	UDZS22B

Mark No. Description	Part No.
D2203-D2206, D2209-D2212	UDZS9.1B

CAPACITORS

Mark No. Description	Part No.
⚠ C2202,C2203 (1u/100v)	ACH1237
C2207,C2208 (470u/71V)	ACH7193
C2209, C2210	CEAT101M63
C2211, C2212	CEAT221M63

RESISTORS

Mark No. Description	Part No.
⚠ R2205, R2206	RS1LMF332J
Other Resistors	RS1/16S###J

OTHERS

Mark No. Description	Part No.
2201, 2202 6P CABLE HOLDER	51048-0600
2203 6P CABLE HOLDER	51052-0600
H2201-H2204 FUSE CLIP	AKR1004
J2201 JUMPER WIRE 6P	D20PYY0615E
J10 JUMPER WIRE	D25PYY0607E

AG VH TR ASSY [AWX8018]

SEMICONDUCTORS

Mark No. Description	Part No.
⚠ Q2232	2SA1837D1
⚠ Q2231	2SC4793D1
⚠ D2231, D2232	1SR154-400

RESISTORS

Mark No. Description	Part No.
All Resistors	RS1/16S###J

OTHERS

Mark No. Description	Part No.
CN2231 6P L TYPE CONNECTOR	KPD6L

AH TRANS 2-2 ASSY [AWX7970]

SEMICONDUCTORS

Mark No. Description	Part No.
⚠ IC2251, IC2252 PROTECTOR(3.15A)	AEK7016
⚠ IC2253 PROTECTOR(5A)	AEK7019

CAPACITORS

Mark No. Description	Part No.
C2251-C2253	CQMBA104J50

RESISTORS

Mark No. Description	Part No.
⚠ R2251, R2252	RD1/4MUF100J

OTHERS

Mark No. Description	Part No.
2251 7P CABLE HOLDER	51048-0700

AI TRANS 1 ASSY

TRANS 1 Assy has no service parts.

AJ PRIMARY ASSY [AWX7998]

SEMICONDUCTORS

Mark No. Description	Part No.
⚠ IC2001	NJM78M56FA
Q2001	KRC101M
D2002, D2004, D2005	1SS355
⚠ D2001	S1WB(A)60SD
D2003	UDZS5.1B

COILS AND FILTERS

Mark No. Description	Part No.
⚠ L2001 LINE FILTER	ATF7018
L2002,L2003 FERRITE BEAD	VTH1013

TRANSFORMERS

Mark No. Description	Part No.
⚠ T2001	ATT7040

SWITCHES AND RELAYS

Mark No. Description	Part No.
⚠ RY2001	ASR7025

CAPACITORS

Mark No. Description	Part No.
⚠ C2001,C2002 (0.01uF/275V)	ACE7013
⚠ C2003 (10000pF/250V)	ACG7033
C2008	CEAT102M25
C2009	CEAT221M25
C2005-C2007, C2011, C2012	CKSRYB103K50
C2004	CQMA103J50

RESISTORS

Mark No. Description	Part No.
R2002	RD1/2VM101J
Other Resistors	RS1/16S###J

OTHERS

Mark No. Description	Part No.
CN2002 11P FFC CONNECTOR	52045-1145
⚠ CN2005 AC SOCKET 1-P	AKP1034
H2001,H2002 FUSE CLIP	AKR7001
CN2003,CN2004 5P SOCKET	KP200TA5L
⚠ CN2001 AC CORD SOCKET	RKP1751
KN2001 EARTH METAL FITTING	VNF1084

AK FM/AM TUNER MODULE [AXQ7232]

SEMICONDUCTORS

Mark No. Description	Part No.
IC201	BA1451F
IC202	LC72131MD
Q201, Q204, Q205, Q601	2SC2412K
Q202	DTA124ES
Q203, Q602	DTC124EK
D201	1SS133
D601	HVU187
D202	MTZJ5.1C
D101	UDZS6.8B

COILS AND FILTERS

Mark No. Description	Part No.
L201 FM DETECTOR COIL	ATE7003
F202 FM CERAMIC FILTER	ATF-107
F201 FM CERAMIC FILTER	ATF-119
F601 ANTIBIRDY FILTER	ATF7025
F203 AM CERAMIC FILTER	ATF7026
L602	LAU2R2J
L601	LCTA270J2520

CAPACITORS

Mark No. Description	Part No.
C605	CCSQCH680J50
C212, C213, C226, C233–C235	CCSRCH101J50
C240, C614	CCSRCH101J50
C206	CCSRCH120J50
C231, C232	CCSRCH150J50
C223	CEAT100M50
C229	CEAT101M10
C224	CEAT1R0M50
C227	CEAT220M25
C241	CEAT2R2M50
C243	CEAT330M16
C228	CEAT3R3M50
C237	CEAT470M10
C211	CEJQ1R0M50
C210	CEJQ470M16

Mark	No.	Description	Part No.
	C103, C104, C204, C238, C609		CKSRYB102K50
	C102, C208, C216, C217, C220		CKSRYB103K50
	C239, C242, C604, C610, C615		CKSRYB103K50
	C225		CKSRYB153K50
	C607, C608		CKSRYB182K50
	C201, C205, C214, C230, C236		CKSRYB223K50
	C244, C611		CKSRYB223K50
	C221		CKSRYB224K10
	C603		CKSRYB392K50
	C215		CKSRYB471K50
	C202, C222		CKSRYB473K16
	C606		CKSRYB561K50
	RESISTORS		
	R211		RD1/4PU221J
	R221		RD1/4PU222J
	R233		RD1/4PU391J
	R103, R104		RS1/10S221J
	Other Resistors		RS1/16S###J
	OTHERS		
	CN201	13P FFC CONNECTOR	52044-1345
	BN201	2P TERMINAL WITH PAL	AKA7002
		SHIELD CASE T	ANK7072
		SHIELD CASE B	ANK7073
	X201	CRYSTAL RESONATOR (7.2MHz)	ASS1093
		FM FRONT END	AXF7005
		AM RF TUNING BLOCK	AXX7072

6. ADJUSTMENT

■ AM Tuner Section

- There is no adjustment in the AM tuner.

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	ANT. Input level and signal condition			Adjustment	
		Frequency (MHz)	Modulation	Input Level (dBμV)	Adjust point	Contents
1	T-METER Adjustment	98	OFF	80	L201	Adjust L201 so that the DC voltage between Pin 21 and Pin 23 of IC201 (Test point Vtm) gets within 0 ± 50mV.

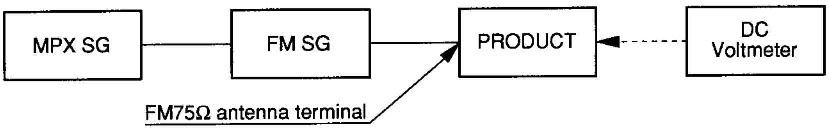

MPX SG
FM SG
PRODUCT
DC Voltmeter
FM75Ω antenna terminal

Fig.1 Adjustment Wiring Diagram

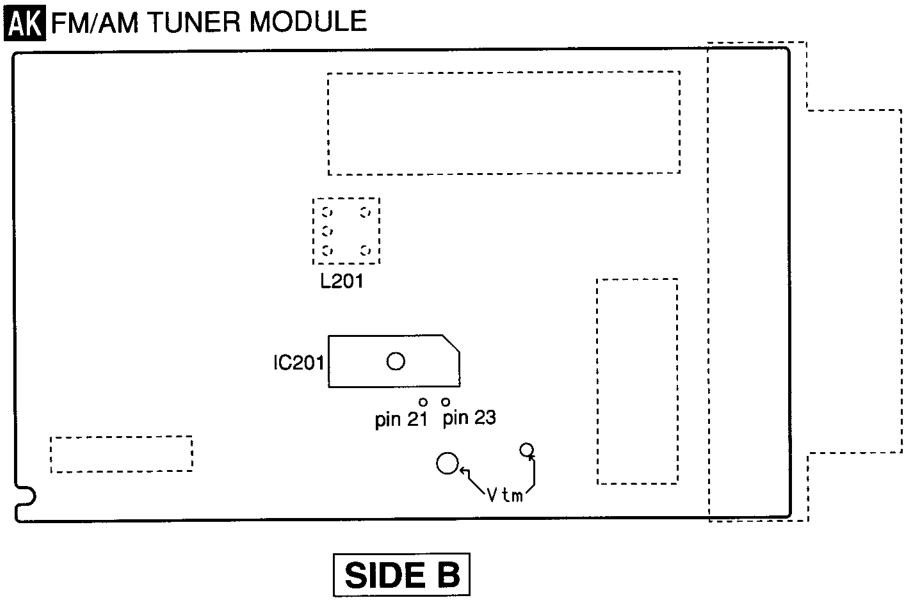

AK FM/AM TUNER MODULE
L201
IC201
pin 21
pin 23
Vtm
SIDE B

Fig.2 Adjustment Point

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 PROTECTION CIRCUIT CONTROL SPECIFICATION

Microcomputer-related ports

FAN_DRIVE (Expansion IC) : For Fan on/off
TEMP_IN (pin 94)
    Input port (A/D) : To detect temperature
FAN_STOP (pin 95)
    Input port : To detect Fan forced stop
OL_DET (pin 73)
    Input port : To detect overloading at the amplifier
        (Interrupt port)
DC_DET (pin 63)
    Input port : For DC detection

The following control processes are activated immediately before the relay system is turned on upon power-on. The time is 4.8 seconds after power-on. (Control of the relay system is enabled 5.2 seconds after power-on.)
Only DC detection is enabled 2 seconds after power-on to activate it before other protection functions.

① Fan control

1) Fan control

TEMPIN	Temperature (°C)	Fan	Remarks
More than 219	More than 125	ON	Mute ON & speaker relay OFF : The warning indication "OVERHEAT"
204 to 218	110 to 125	ON	Leading hold
156 to 203	80 to 110	ON	Mute OFF & speaker relay ON : Normal mode
134 to 155	70 to 80	Leading hold	
Less than 133	Less than 70	OFF	

2) Fan detection

If the fan is forcibly stopped, the FAN_DET port becomes "L".
Detecting "L" the microcomputer performs the following operations:

1. System muting on
2. Protection relays off

The warning indication "FAN STOP" appears (flashing) on the FL display.
If this status continues for more than 3 seconds, the power is turned off (for Standby mode).
If the port becomes "H" within 3 seconds, the unit resets automatically.
FAN_DET port performs the chattering check for 1 msec.
In addition, there is the case that detection delays for maximum 20 msec because performs monitor of FAN_DET port with a main loop.

3) Thermistor open detection

If a total (total of 50 times) of A/D value (TEMPIN) for one second is less than 250, the indication "THDCT NG" flashes.
If this status continues for 3 seconds, the power becomes the standby mode.

② Overload detection (abnormality detection)

If the speaker terminals are short-circuited or low-load driving is detected, the OL_DET port becomes "L".
Detecting "L" edge interrupt in an interrupt process, the microcomputer performs the following operations:

1. System muting on
2. Speaker relay off (Control with the display microcomputer)
3. Power off (Standby mode)

③ DC detection (defect detection)

Only DC detection is enabled 2 seconds after power-on.
If there is a fault in the power amplifier or a high-level signal lower than 5 Hz is input, the DC_DET port becomes "L".
Detecting "L" the microcomputer performs the following operations:

1. System muting on
2. Speaker relay off (Control with the display microcomputer)

The warning indication "AMP ERR" appears on the FL display.

If this status continues for more than 3 seconds, the power is turned off (for Standby mode) and flashes the standby LED.
Do not accept the key input afterward.
(Flash it always till turns the primary side off.)
If the port becomes "L" within 3 seconds, the unit resets automatically.

DC_DET port performs the chattering check for 1 msec.
In addition, there is the case that detection delays for maximum 20 msec because performs monitor of DC_DET port with a main loop.
Even if turns the primary side off and turns on once again, standby LED flashes as it is.
If detects DC once and turned the power off, do not accept the key input afterward.
However, power on is possible when the following key was pressed to be able to key input in the protection line and service.

1. Test mode (remote control code : A55F)
2. When the STEREO/DIRECT key and SIGNAL SELECT key are both held pressed for 2 seconds.
   (It is effective only when turned the power off with DC detection regarding step 2.)

④ Diagnostic mode

This mode is only for servicing and checking the circuit design, and not open to users.
When the STEREO/DIRECT key and TONE + key are both held pressed for 2 seconds in Standby mode, the power is turned on, and the number of times of each defect or Speaker relay off by abnormality detection is sequentially displayed on the FL display.

Displayed items:

- DC detection
- Overload detection
- Fan detection
- Temperature detection

Hold the STEREO/DIRECT key and TONE + key pressed for 2 seconds in Standby mode.

```
PROT CHK
DCDET        003
     ↓
PROT CHK
OVERLOAD     012
     ↓
PROT CHK
FANSTOP      000
     ↓
PROT CHK
TEMP         000
```

Display changes automatically every 3 seconds.

When the MULTI CH IN key and TONE – key are both held pressed for 2 seconds in standby mode, all clear the counter for detection.

● Protection Process List

Item	Purpose	Detection Method	Process	Warning Indication	Remarks
DC detection	To detect amplifier damage (defect status) A process to protect speakers (for protection of connected external devices)	Detects when the DC_DET port becomes "L".	Turns muting on and speaker relay off, then turns off the power after 3 seconds.	Flashing "AMP ERR" for 3 seconds. Flash the standby LED after the power off.	Once detected and turned the power off, input a key never again.
AMP overload	To detect overloading (abnormal status) With low-load driving or a short circuit of the speaker terminals (for protection of the amplifier)	Detects when the AMP_OL port becomes "L" (checks by interrupt).	Turns muting on and speaker relay off, and immediately turns off the power.	None	
Fan control	Protection function against a temperature rise at the heat sink	Detect temperature more than 100°C.	Turns muting on and speaker relay off. Rotate the fan	Continue flasing with "OVERHEAT"	
		Detect temperature of 90 to 100°C.	Rotate the fan		Mute, relay and warning indications is leading hold.
		Detect temperature of 74 to 90°C.	Rotate the fan		Mute off & relay on (normal mode)
		Detect temperature of 69 to 74°C.	Fan is leading hold		
		A condition except the above.	Stop the fan		
Fan stop	To know that the rotating fan is forcibly stopped	Detects when the FAN_DET port becomes "L".	Turns muting on and speaker relay off, then turns off the power after 3 seconds.	Flashing "FAN STOP" for 3 seconds	If the FAN_DET port becomes "H" within 3 seconds, the unit resets automatically. After the power off, the key input is possible once again.

7.1.2 DIAGNOSTICS OF AMPLIFIER SECTION

When DC detection worked (STBY IND. flashes for a long time) in the protection circuit of foregoing section (or there is not the speaker output, probably only 1CH), failure (damage) of the power amplifier section is considered.

Because this receiver cannot diagnose the amplifier section by an electricity state by structure, please diagnose it in the following steps.

Caution:
When release the STBY (flashes) state before repair, Because there is the case that the damage progresses when turns the power on once again, please be careful.

- According to a symptom, perform the following confirmation beforehand.

1. Are not Fuse and IC protector opening it?

2-a. When can turn on electricity, confirm that supply voltage of the point that can measure is appropriate.

2-b. Furthermore, confirm that voltage ((in a no signal) DC and the appropriate signal output) between GND and R4621-4627 (Either of the amplifier side and the speaker terminal side is possible) (Or remove either of CN4601-4604). And limit failure CH.

If was able to limit failure CH, diagnose the CH in the following steps.

- **Use the tester basically and check that each part is not damaged (resistance value / open / short circuit).**

About parts with damaged possibility, explain FL ch to an example in order.

1. R4131, 4132 (ACN7107: 0.1 Ω, 1W chip drain resistor)
   IC 4102, 4103
   (PBD001A: Nch, PBD002A: Pch output POWER MOS Tr.)

2. R4119 (ACN7111: 0.22 Ω .5W ×2 cement source resistor)
   R4117, 4118
   (RS1/16S471J: 470 Ω chip resistor for protection circuit)
   D4101, 4103
   (UDZS10B: 10V Zener diode for current limiting)
   D4102, 4104 (1SS355: Small signal diodes same as above)
   R4110, 4111 (RS1/16S560J: 56 Ω chip gate resistor)
   R4106, 4107
   (RS1/16S101J:100 Ω chip IC4101 power filter resistor)

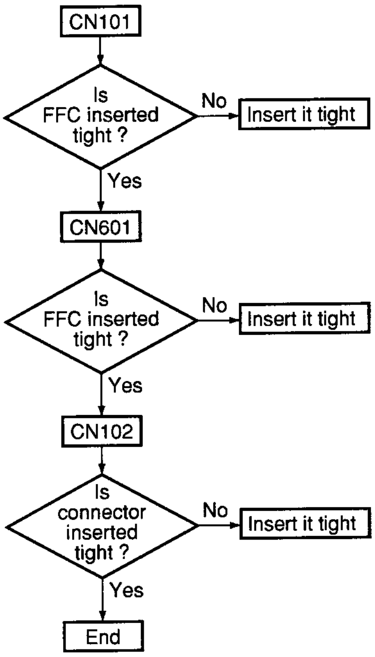
3. IC4101 (PA9009A: Power amplifier with output current bias Voltage step HIC)
   IC4701, 4702
   (AEK7023: 200mA IC protector /FAN CONNECTION Assy)

4. Q2231, 2232 (2SC4793,2SA1837 TO-220 Tr. /VH TR Assy)

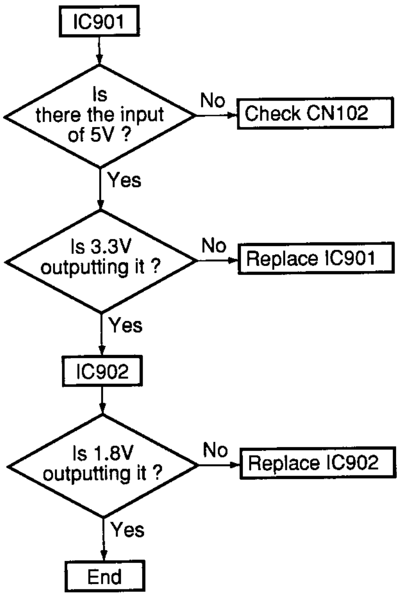
7.1.3 TROUBLE SHOOTING

- When a sound is not out in the surround mode with the digital signal input.
- Suppose CR to be poor contact and that is not damaged.
- This shows failure analysis of DSP Assy.

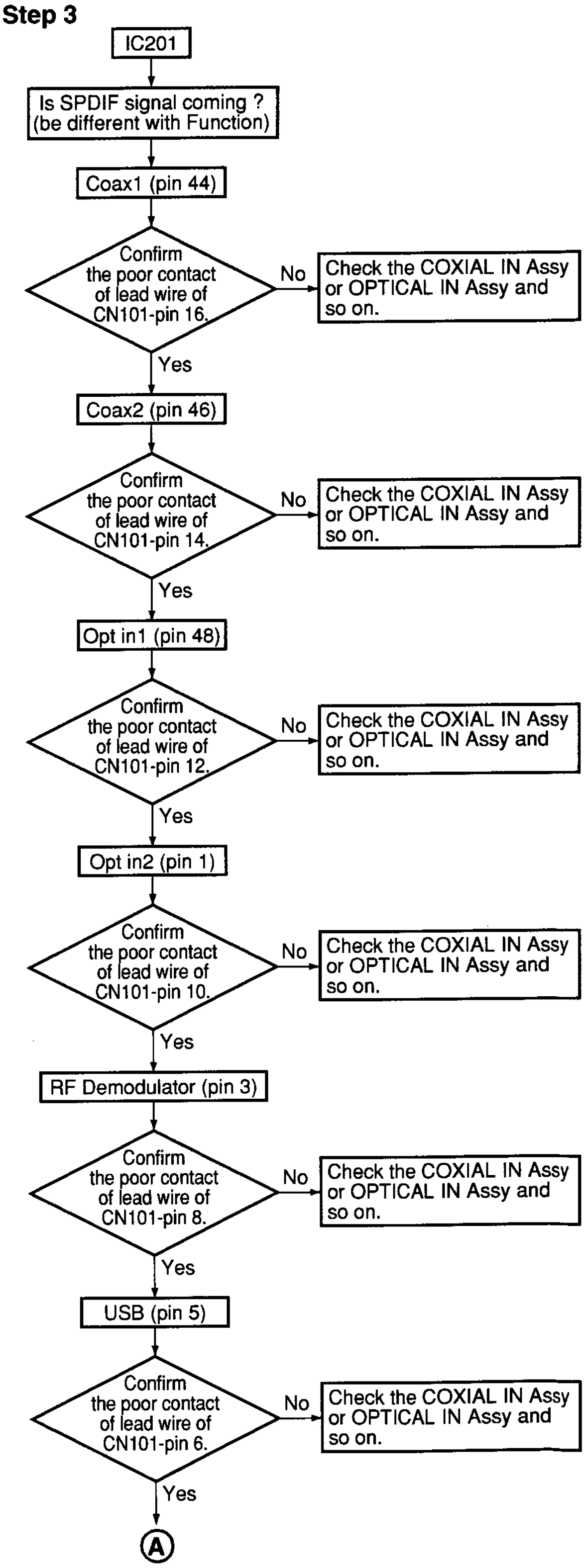
Step 1

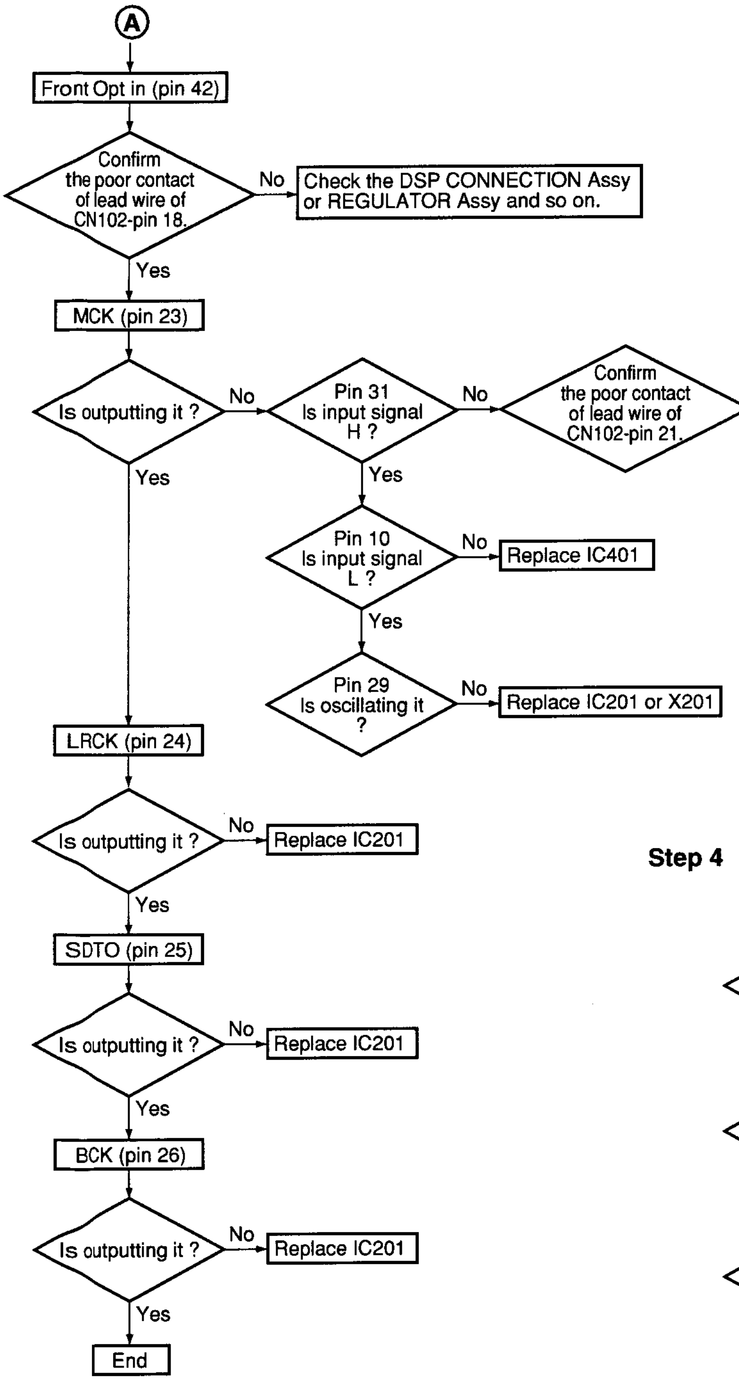

CN101
Is FFC inserted tight ?
No
Insert it tight
Yes
CN601
Is FFC inserted tight ?
No
Insert it tight
Yes
CN102
Is connector inserted tight ?
No
Insert it tight
Yes
End

Step 2

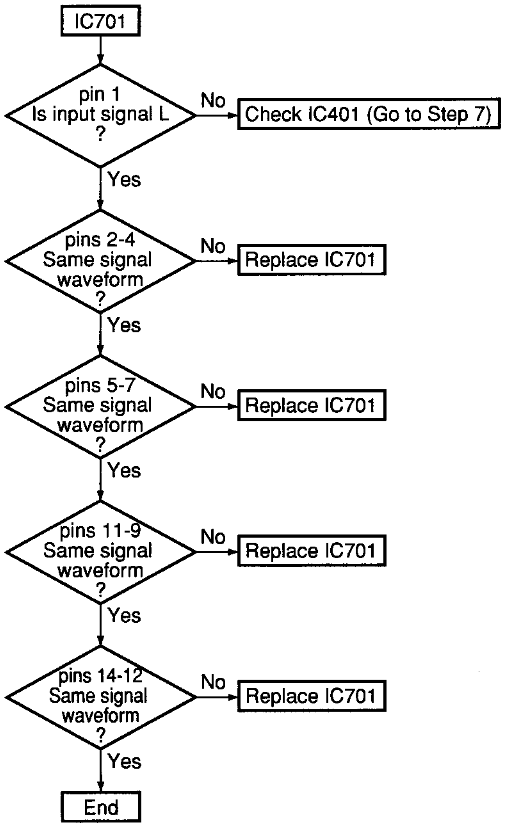

IC901
Is there the input of 5V ?
No
Check CN102
Yes
Is 3.3V outputting it ?
No
Replace IC901
Yes
IC902
Is 1.8V outputting it ?
No
Replace IC902
Yes
End

Step 3

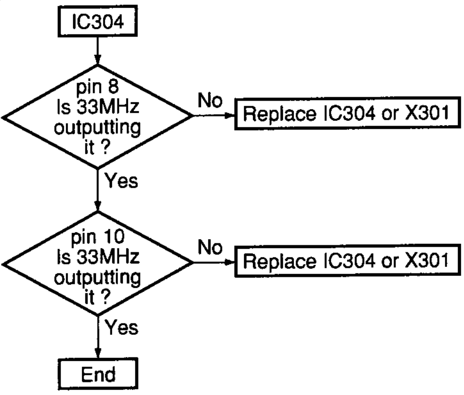

IC201
Is SPDIF signal coming ? (be different with Function)
Coax1 (pin 44)
Confirm the poor contact of lead wire of CN101-pin 16.
No
Check the COXIAL IN Assy or OPTICAL IN Assy and so on.
Yes
Coax2 (pin 46)
Confirm the poor contact of lead wire of CN101-pin 14.
No
Check the COXIAL IN Assy or OPTICAL IN Assy and so on.
Yes
Opt in1 (pin 48)
Confirm the poor contact of lead wire of CN101-pin 12.
No
Check the COXIAL IN Assy or OPTICAL IN Assy and so on.
Yes
Opt in2 (pin 1)
Confirm the poor contact of lead wire of CN101-pin 10.
No
Check the COXIAL IN Assy or OPTICAL IN Assy and so on.
Yes
RF Demodulator (pin 3)
Confirm the poor contact of lead wire of CN101-pin 8.
No
Check the COXIAL IN Assy or OPTICAL IN Assy and so on.
Yes
USB (pin 5)
Confirm the poor contact of lead wire of CN101-pin 6.
No
Check the COXIAL IN Assy or OPTICAL IN Assy and so on.
Yes
Ⓐ


A
Front Opt in (pin 42)
Confirm the poor contact of lead wire of CN102-pin 18.
No
Check the DSP CONNECTION Assy or REGULATOR Assy and so on.
Yes
MCK (pin 23)
Is outputting it ?
No
Pin 31 Is input signal H ?
No
Confirm the poor contact of lead wire of CN102-pin 21.
No
Check the DSP CONNECTION Assy or REGULATOR Assy.
Yes
Yes
Pin 10 Is input signal L ?
No
Replace IC401
Yes
Pin 29 Is oscillating it ?
No
Replace IC201 or X201
LRCK (pin 24)
Is outputting it ?
No
Replace IC201
Yes
SDTO (pin 25)
Is outputting it ?
No
Replace IC201
Yes
BCK (pin 26)
Is outputting it ?
No
Replace IC201
Yes
End

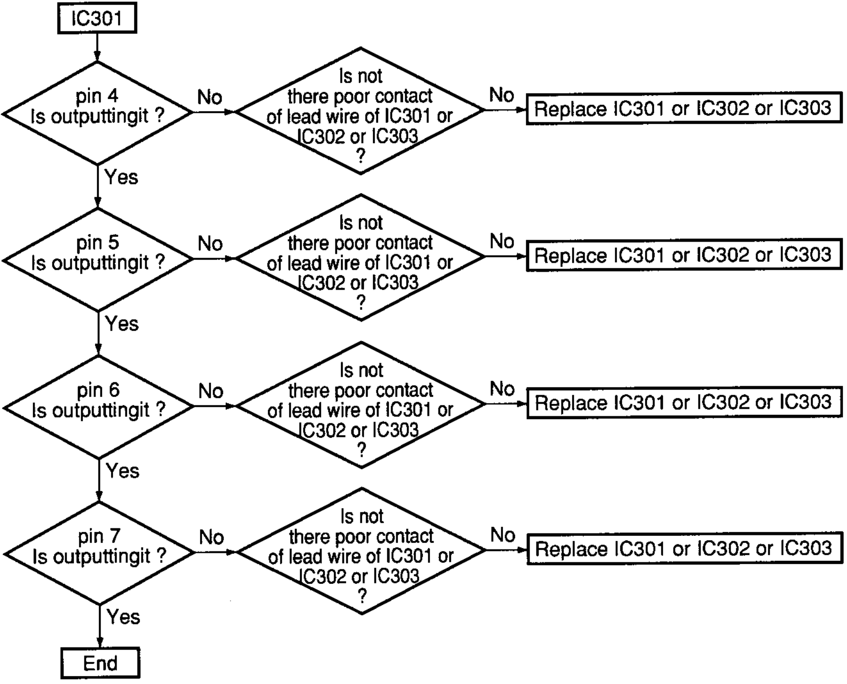
Step 4


IC701
pin 1 Is input signal L ?
No
Check IC401 (Go to Step 7)
Yes
pins 2-4 Same signal waveform ?
No
Replace IC701
Yes
pins 5-7 Same signal waveform ?
No
Replace IC701
Yes
pins 11-9 Same signal waveform ?
No
Replace IC701
Yes
pins 14-12 Same signal waveform ?
No
Replace IC701
Yes
End

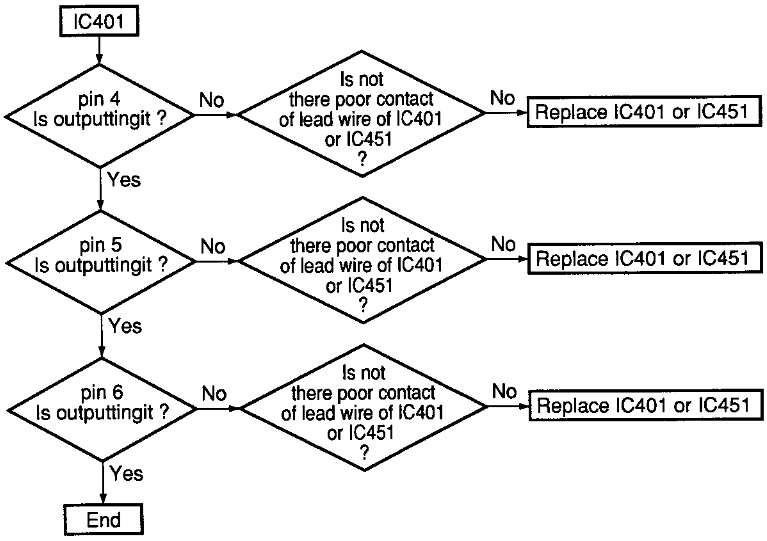
Step 5


IC304
pin 8
Is 33MHz
outputting
it ?
No
Replace IC304 or X301
Yes
pin 10
Is 33MHz
outputting
it ?
No
Replace IC304 or X301
Yes
End

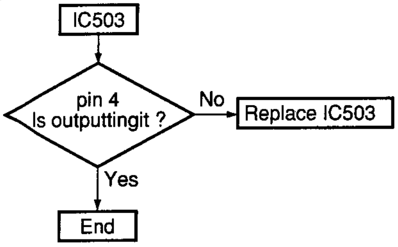
Step 6


IC301
pin 4
Is outputtingit ?
No
Is not
there poor contact
of lead wire of IC301 or
IC302 or IC303
?
No
Replace IC301 or IC302 or IC303
Yes
pin 5
Is outputtingit ?
No
Is not
there poor contact
of lead wire of IC301 or
IC302 or IC303
?
No
Replace IC301 or IC302 or IC303
Yes
pin 6
Is outputtingit ?
No
Is not
there poor contact
of lead wire of IC301 or
IC302 or IC303
?
No
Replace IC301 or IC302 or IC303
Yes
pin 7
Is outputtingit ?
No
Is not
there poor contact
of lead wire of IC301 or
IC302 or IC303
?
No
Replace IC301 or IC302 or IC303
Yes
End

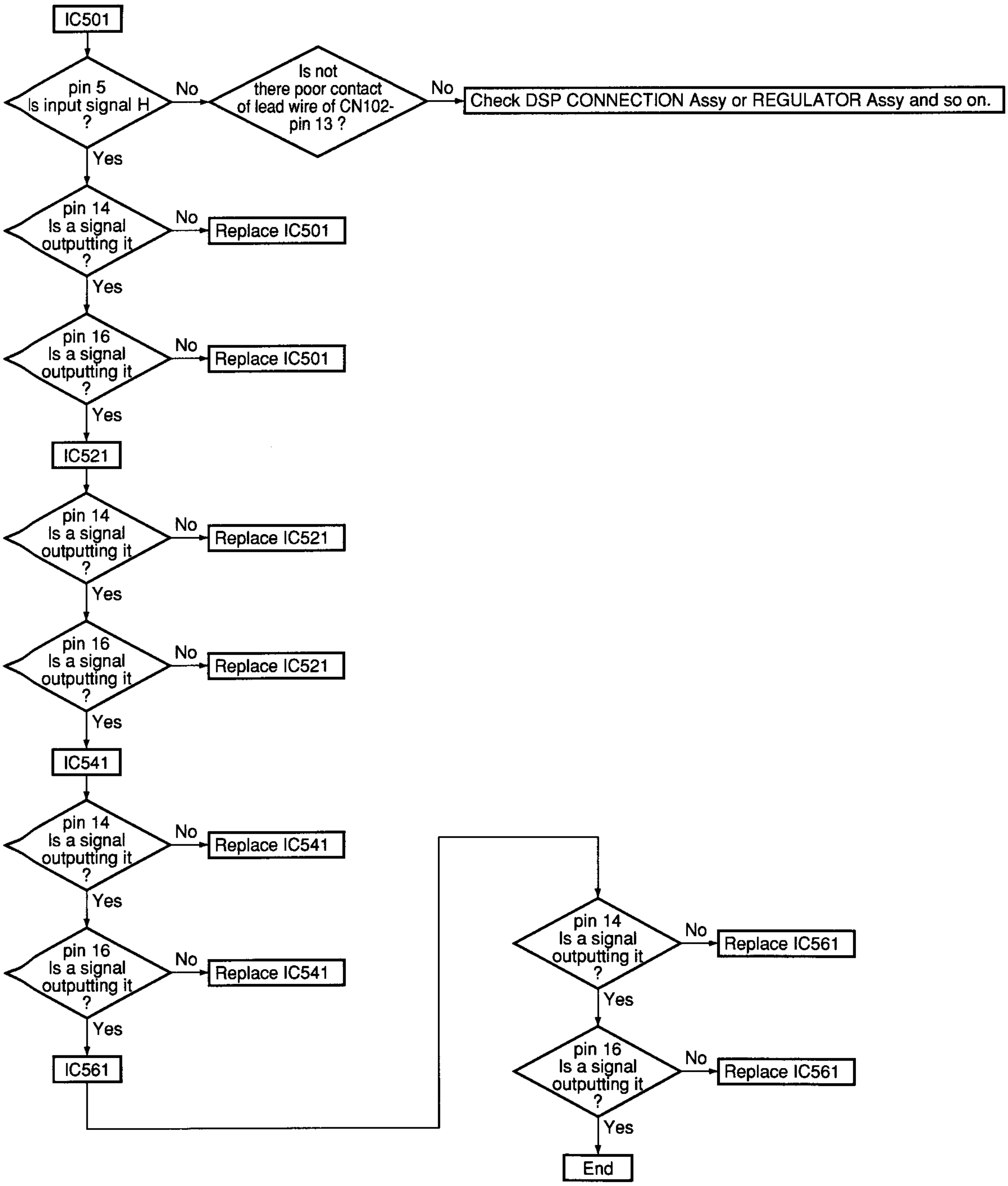
Step 7


IC401
pin 4
Is outputtingit ?
No
Is not
there poor contact
of lead wire of IC401
or IC451
?
No
Replace IC401 or IC451
Yes
pin 5
Is outputtingit ?
No
Is not
there poor contact
of lead wire of IC401
or IC451
?
No
Replace IC401 or IC451
Yes
pin 6
Is outputtingit ?
No
Is not
there poor contact
of lead wire of IC401
or IC451
?
No
Replace IC401 or IC451
Yes
End

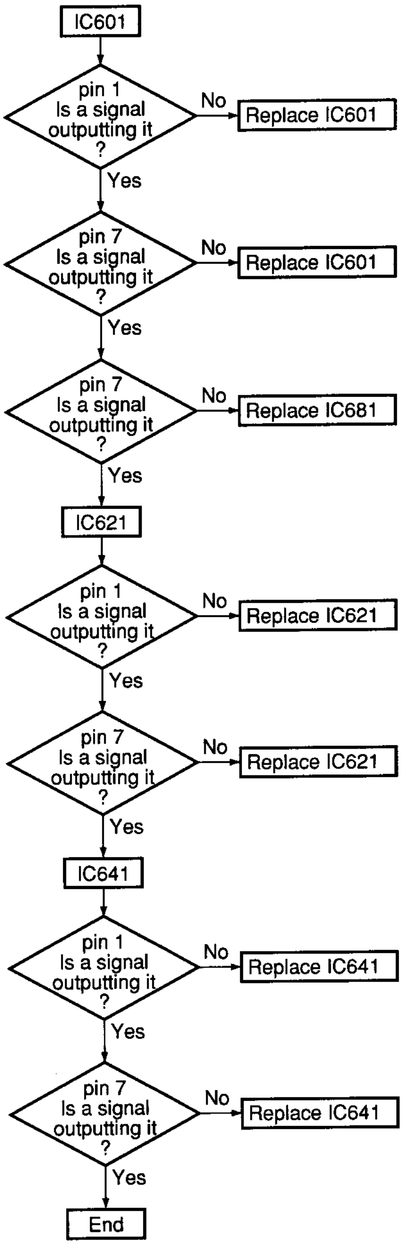
Step 8


IC503
pin 4
Is outputtingit ?
No
Replace IC503
Yes
End

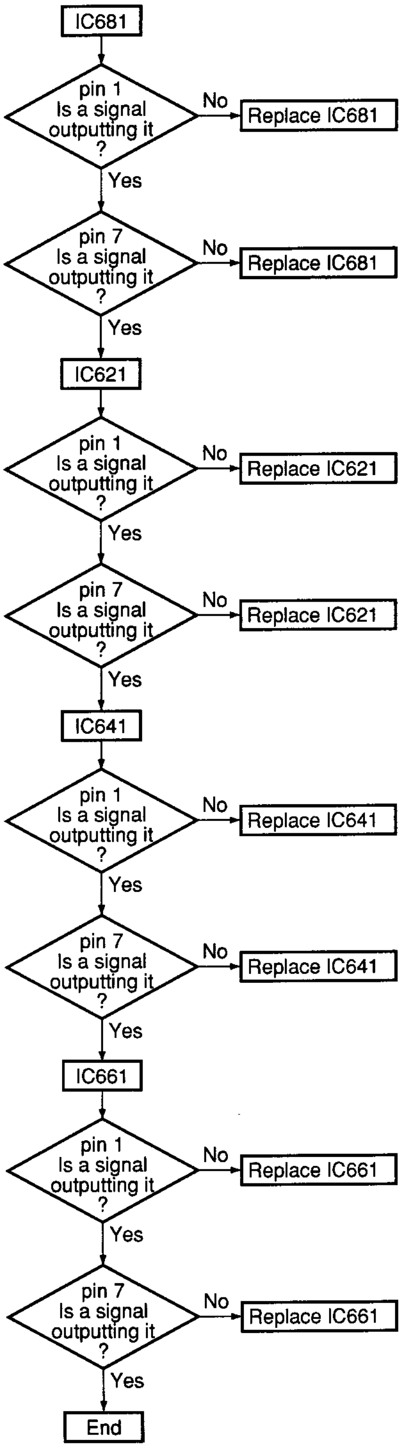
Step 9


IC501
pin 5
Is input signal H
?
No
Is not
there poor contact
of lead wire of CN102-
pin 13 ?
No
Check DSP CONNECTION Assy or REGULATOR Assy and so on.
Yes
pin 14
Is a signal
outputting it
?
No
Replace IC501
Yes
pin 16
Is a signal
outputting it
?
No
Replace IC501
Yes
IC521
pin 14
Is a signal
outputting it
?
No
Replace IC521
Yes
pin 16
Is a signal
outputting it
?
No
Replace IC521
Yes
IC541
pin 14
Is a signal
outputting it
?
No
Replace IC541
Yes
pin 16
Is a signal
outputting it
?
No
Replace IC541
Yes
IC561
pin 14
Is a signal
outputting it
?
No
Replace IC561
Yes
pin 16
Is a signal
outputting it
?
No
Replace IC561
Yes
End

Step 10


IC601
pin 1
Is a signal outputting it ?
No
Replace IC601
Yes
pin 7
Is a signal outputting it ?
No
Replace IC601
Yes
pin 7
Is a signal outputting it ?
No
Replace IC681
Yes
IC621
pin 1
Is a signal outputting it ?
No
Replace IC621
Yes
pin 7
Is a signal outputting it ?
No
Replace IC621
Yes
IC641
pin 1
Is a signal outputting it ?
No
Replace IC641
Yes
pin 7
Is a signal outputting it ?
No
Replace IC641
Yes
End

Step 11

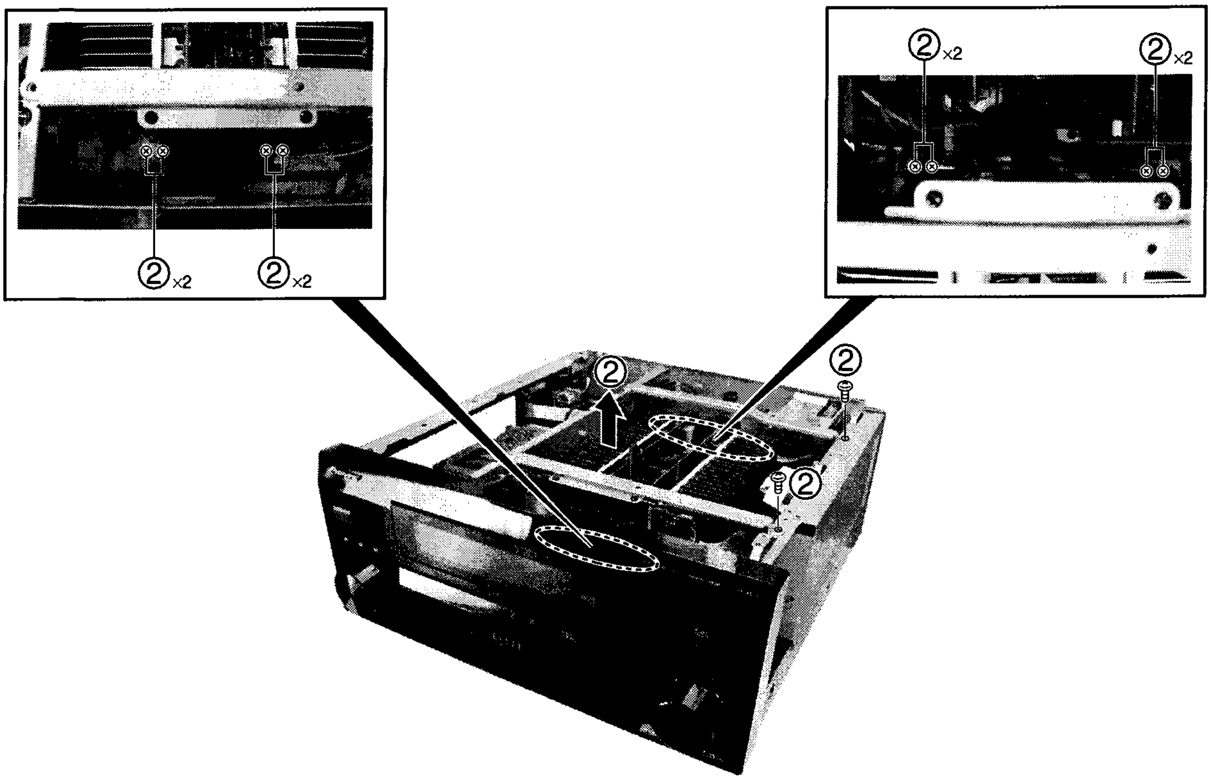

IC681
pin 1
Is a signal outputting it ?
No
Replace IC681
Yes
pin 7
Is a signal outputting it ?
No
Replace IC681
Yes
IC621
pin 1
Is a signal outputting it ?
No
Replace IC621
Yes
pin 7
Is a signal outputting it ?
No
Replace IC621
Yes
IC641
pin 1
Is a signal outputting it ?
No
Replace IC641
Yes
pin 7
Is a signal outputting it ?
No
Replace IC641
Yes
IC661
pin 1
Is a signal outputting it ?
No
Replace IC661
Yes
pin 7
Is a signal outputting it ?
No
Replace IC661
Yes
End

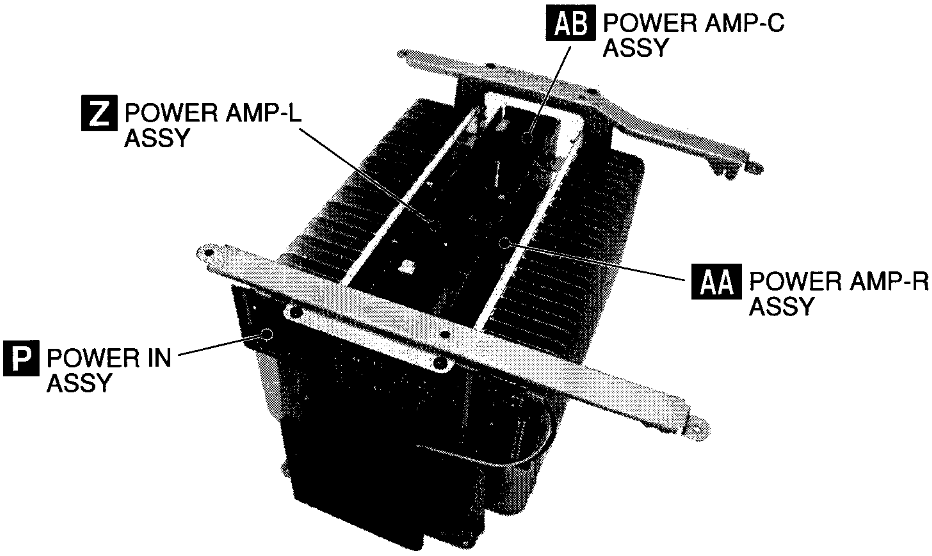
7.1.4 DISASSEMBLY

1 Bonnet and Heat Sink Block

① Remove the bonnet case (screws × 23)

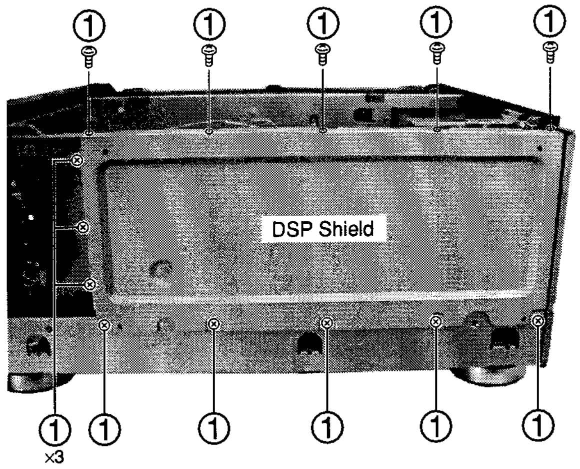
② Remove the heat sink block (screws × 10, connectors × 8)


②×2
②×2
②×2
②×2
②
②
②

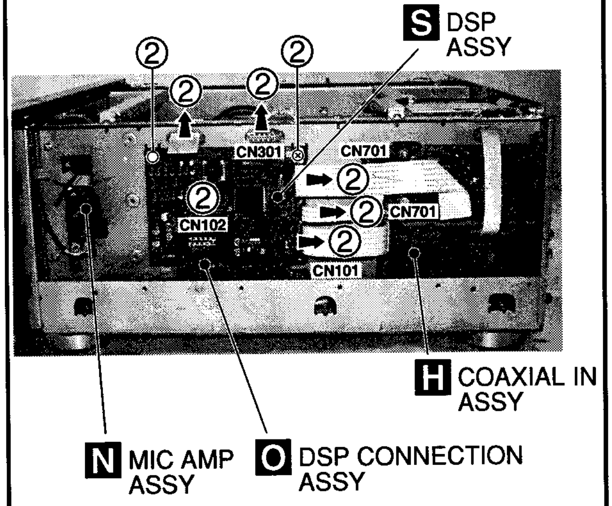

AB POWER AMP-C ASSY
Z POWER AMP-L ASSY
AA POWER AMP-R ASSY
P POWER IN ASSY

2 DSP Block

① Remove the DSP shield (screws × 13)

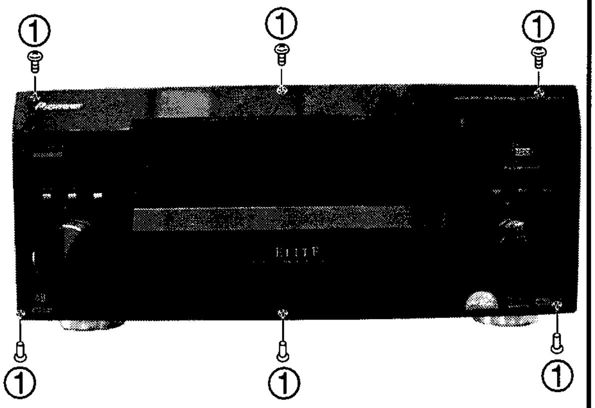

①
①
①
①
①
DSP Shield
①
×3
①
①
①
①
①

② Remove the DSP ASSY
(screws × 1, Nylon Rivet × 1, connectors × 6)


S DSP ASSY
②
②
②
②
CN301
CN701
②
②
CN701
②
CN102
②
CN101
H COAXIAL IN ASSY
N MIC AMP ASSY
O DSP CONNECTION ASSY

3 Front Panel Block

① Remove six screws

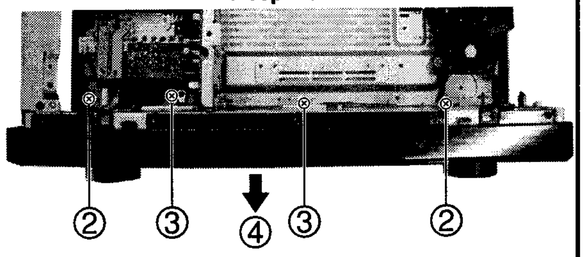


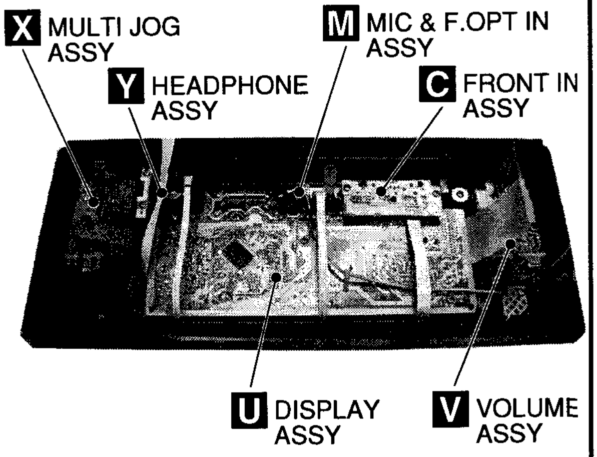
② Remove two screws

③ Remove two screws

④ Remove the front panel block

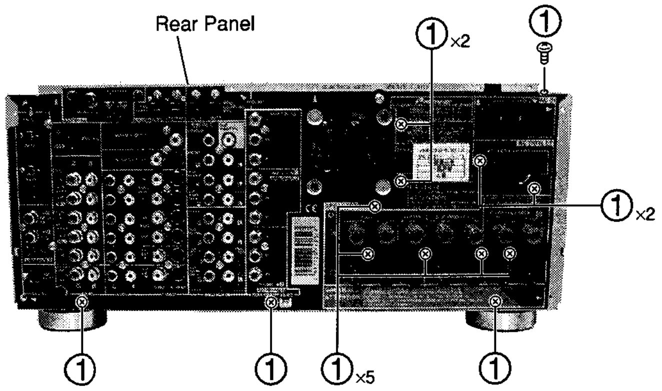
● Top View




X MULTI JOG ASSY
M MIC & F.OPT IN ASSY
Y HEADPHONE ASSY
C FRONT IN ASSY
U DISPLAY ASSY
V VOLUME ASSY

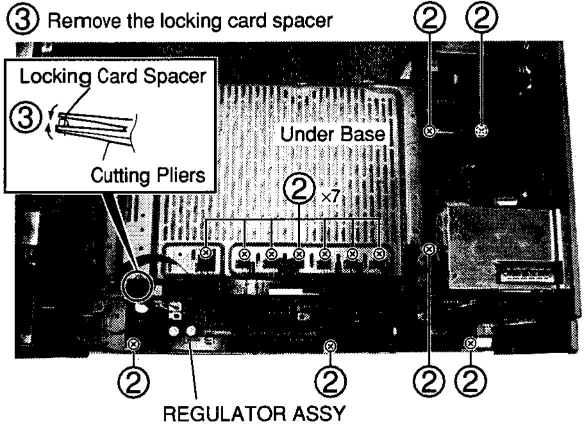
4 Rear Panel Block

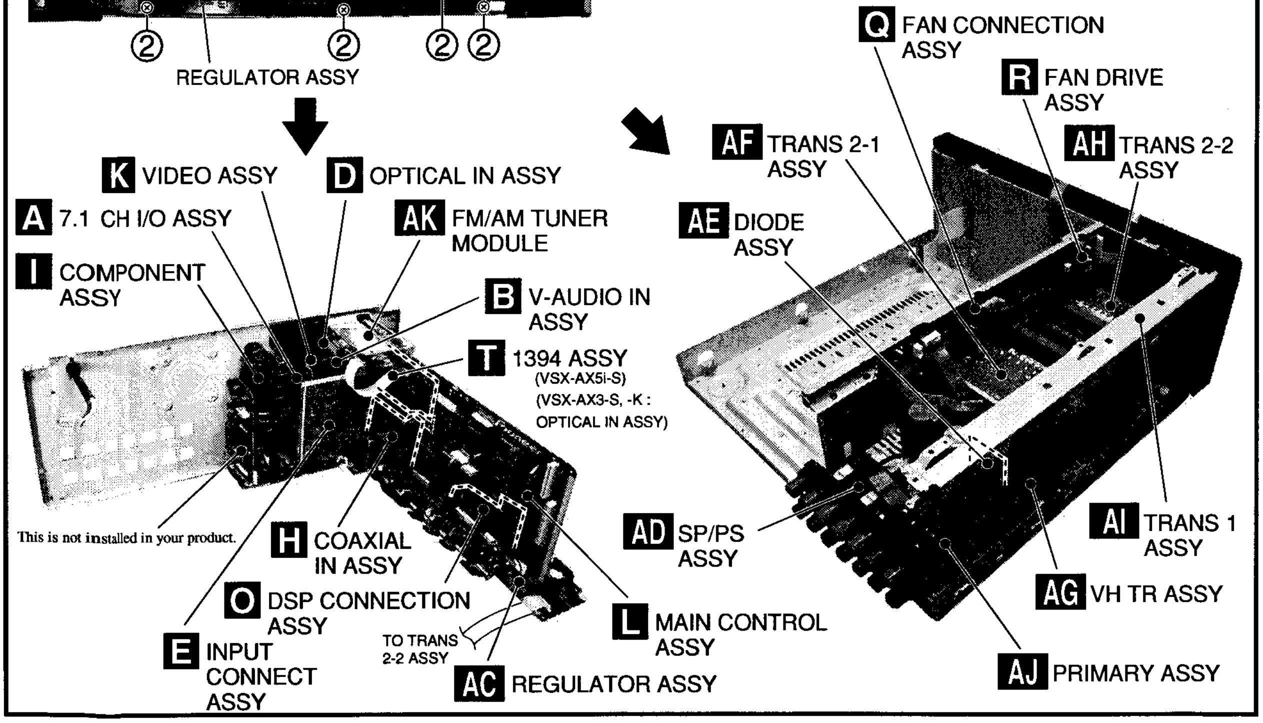
① Remove 14 screws


Rear Panel
①×2
①
①×2
①
①
①×5
①

② Remove 13 screws

③ Remove the locking card spacer


②
②
Locking Card Spacer
③
Cutting Pliers
Under Base
②×7
②
②
②
②
REGULATOR ASSY


K VIDEO ASSY
D OPTICAL IN ASSY
A 7.1 CH I/O ASSY
AK FM/AM TUNER MODULE
I COMPONENT ASSY
B V-AUDIO IN ASSY
T 1394 ASSY
(VSX-AX5i-S)
(VSX-AX3-S, -K : OPTICAL IN ASSY)
This is not installed in your product.
H COAXIAL IN ASSY
O DSP CONNECTION ASSY
E INPUT CONNECT ASSY
TO TRANS 2-2 ASSY
AC REGULATOR ASSY
L MAIN CONTROL ASSY
Q FAN CONNECTION ASSY
R FAN DRIVE ASSY
AF TRANS 2-1 ASSY
AH TRANS 2-2 ASSY
AE DIODE ASSY
AD SP/PS ASSY
AI TRANS 1 ASSY
AG VH TR ASSY
AJ PRIMARY ASSY

7.2 PARTS

7.2.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

● List of IC

PD8112A, PD5948A8, PD5899A, PD5771B, BU4094BCF

■ PD8112A (1394 ASSY: IC301)

• Flow Control IC

● Pin Function

No.	Pin Name	I/O	Pin Function
1	VDDOUT	–	Digital VDD (3.3V)
2	SPDIFOUT	O	IEC60958 output
3	SDATA3O	O	MBLA data output (5 ch, 6 ch) (at flow: I2S)
4	SDATA2O	O	MBLA data output (3 ch, 4 ch) (at flow: I2S)
5	SDATA1O	O	MBLA data output (1 ch, 2 ch) (at flow: I2S)
6	SDATA0O	O	MBLA ancillary data output (at flow: I2S)
7	LRCKOUT	O	MBLA LRCK output
8	BCKOUT	O	MBLA BCK output (64fs)
9	AMCLKOUT	O	Master clock output (When AMCLKEN output is LOW, active Hi-Z.)
10	AMCLKEN	O	When 60958 is selected or OUTPUTEN=L output, active LOW. For external clock control
11	SDERRO	O	Data error flag output
12	VSSOUT	–	Digital GND
13	VDDOUT	–	Digital VDD (3.3V)
14	SDMUTEO	O	Data mute flag output MUTE: H
15	SAPCMBCKIN	I	BCK input when converting SACD to MLPCM
16	SAPCMLRCKIN	I	LRCK input when converting SACD to MLPCM
17	SAPCMD3IN	I	DATA3 input when converting SACD to MLPCM
18	SAPCMD2IN	I	DATA2 input when converting SACD to MLPCM
19	SAPCMD1IN	I	DATA1 input when converting SACD to MLPCM
20	SACDMKO	O	SACD master clock output (2.8224MHz)
21	SACDDAO	O	SACD ancillary data output
22	SACDD0O	O	SACD data output (L)
23	SACDD1O	O	SACD data output (R)
24	SACDD2O	O	SACD data output (C)
25	SACDD3O	O	SACD data output (Lfe)
26	VSSCORE	–	Digital GND (for inside)
27	VDDCORE	–	Digital VDD (3.3V, for inside)
28	SACDD4O	O	SACD data output (Ls)
29	SACDD5O	O	SACD data output (Rs)
30	SACDFRO	O	SACD frame data output (75Hz)
31	TESTMODE0	I	LSI test mode input Normally, "L" fixed
32	TESTMODE1	I	LSI test mode input Normally, "L" fixed
33	PLLMODE	I	VCOCLK division ratio selection Normally, "L"
34	SAPCMMODE	I	0: normal, 1: When the data type is SACD, output SAPCM*** input to MLPCM.
35	XVALMODE	I	0: 64M•128M bit SDRAM, 1: 256M bit SDRAM
36	RJMSBF	I	MLPCM output format setting at flow 0: I2S, 1: Right aligned MSB first
37	SEL512	I	Master clock selection at flow 0: 768fs, 1: 512fs
38	CONT48	O	Output for controlling the oscillator (When FMODE="1" and SEL44K="1", active High)
39	CLK48K	I	Master clock input of fs48kHz (36.864MHz or 24.576MHz)
40	CLK48KI	I	Crystal resonator input of fs48kHz (24.576MHz)
41	CLK48KO	O	Crystal resonator output of fs48kHz (24.576MHz)
42	VSSOUT	–	Digital GND
43	VDDOUT	–	Digital VDD (3.3V)
44	CONT44	O	Output for controlling the oscillator (When FMODE="1" and SEL44K="0", active High)
45	CLK44K	I	Master clock input of fs44.1kHz (33.8688MHz or 22.5792MHz)
46	CLK44KI	I	Crystal resonator input of fs44.1kHz (22.5792MHz)
47	CLK44KO	O	Crystal resonator output of fs44.1kHz (22.5792MHz)
48	SELOSC	I	L: CLK4XK input selection, H: crystal resonator I/O selection As for the crystal resonator, less than 30MHz are insured.

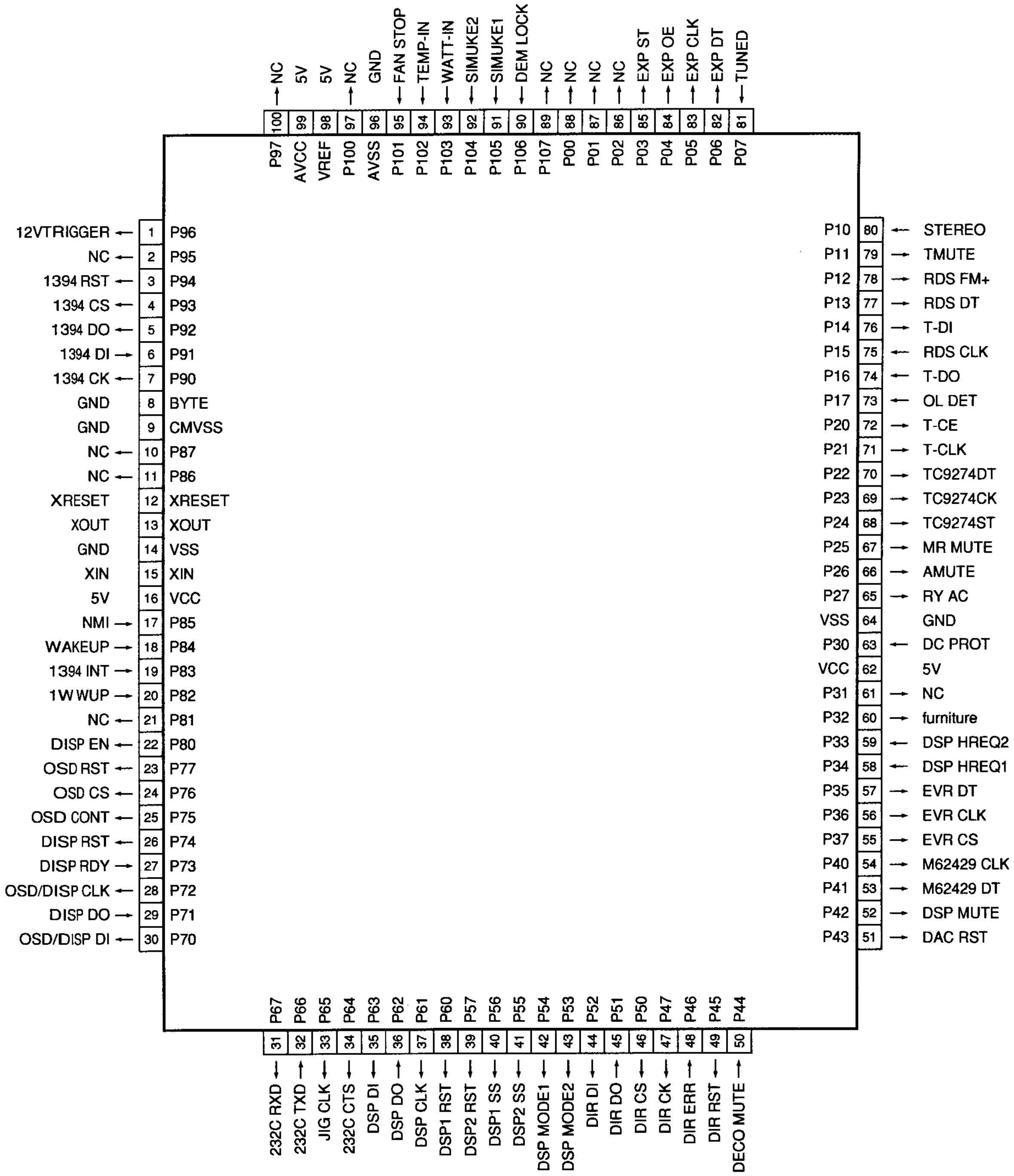
No.	Pin Name	I/O	Function
49	XRESET	I	Logic reset input Reset for L
50	OUTPUTEN	I	Pin for controlling the audio system output H: output, L: Hi-Z
51	FMODE	I	Flow mode control input at flow: H, at through: L
52	SELDTYPE0	I	Data type input 0 00: IEC60958, 01: MBLA
53	SELDTYPE1	I	Data type input 1 1X: SACD
54	SEL44K	I	Selecting signal of master clock input at flow L: CLK48K, H: CLK44K
55	FSSEL0	I	fs setting input 0 00: 44.1/48kHz, 01: 88.2/96kHz
56	FSSEL1	I	fs setting input 1 10: 176.4/192kHz, 11: 29.4/32kHz
57	VSSOUT	–	Digital GND
58	VDDOUT	–	Digital VDD (3.3V)
59	RXSTART	I	Trigger signal input of flow receiving start
60	SACDCHSEL	I	In a through mode, set to 1 in SACD 5 channel receiving. 0: 2ch•6 ch, 1: In 5ch flow receiving, a channel is distinguished automatically by ansillary data.
61	FMUTE	I	Forced mute control signal input Reflect to SDMUTEO.
62	FSTATE0	O	Status output 0 of memory in the flow
63	FSTATE1	O	Status output 1 of memory in the flow 00: Empty < 01: fast < 11: standard < 10: slow • full
64	FSTATE2	O	Status output 2 of flow receive data When received data type to be different from the set data type,active High.
65	TDI	I	Boundary Scan TAP pin
66	TDO	O	Boundary Scan TAP pin
67	TMS	I	Boundary Scan TAP pin
68	TCK	I	Boundary Scan TAP pin
69	TRST	I	Boundary Scan TAP pin
70	SACDMKIN	I	SACD bit clock input
71	SACDFRIN	I	SACD frame signal input
72	SACDD0IN	I	SACD data input 0 (ch1)
73	VSSCORE	–	Digital GND (for inside)
74	VDDCORE	–	Digital VDD (3.3V, for inside)
75	SACDD1IN	I	SACD data input 1 (ch2)
76	SACDD2IN	I	SACD data input 2 (ch3)
77	SACDD3IN	I	SACD data input 3 (ch4)
78	SACDD4IN	I	SACD data input 4 (ch5)
79	SACDD5IN	I	SACD data input 5 (ch6)
80	SACDDAIN	I	SACD ansillary data input
81	AMCLKIN	I	Master clock input (VCO) at through mode
82	SPDIFIN	I	IEC60958 input Data valid input at flow
83	SDMUTEIN	I	Mute flag input at through mode
84	SDERRIN	I	Data error flag input
85	VCOCLK2O	O	VCO clock output 2 (for 512fs)
86	VCOCLK1O	O	VCO clock output 1 (for 768fs)
87	REFSYT	I	PLL reference input (at passive filter)
88	DIVVCO	I	PLL VCO dividing input (at passive filter)
89	VCOEN	I	Built-in VCO control input Low: stop, High: oscillation
90	VSSCORE	–	Digital GND (for inside)
91	VDDCORE	–	Digital VDD (3.3V, for inside)
92	VSSOUT	–	Connect to analog GND
93	VSSPASS	–	Analog GND
94	VDDPASS	–	Analog VDD (3.3V)
95	LPOUT	O	Phase comparator output (analog)
96	LPIN	I	VCO control voltage input (analog)

No.	Pin Name	I/O	Function
97	VDDOUT	–	Connect to analog VDD (3.3V)
98	BCKIN	I	MBLA flow BCK input
99	LRCKIN	I	MBLA flow LRCK input
100	SDATA1IN	I	MBLA flow data input 1
101	SDATA2IN	I	MBLA flow data input 2
102	SDATA3IN	I	MBLA flow data input 3
103	SDATA0IN	I	MBLA flow data input 0
104	VSSOUT	–	Digital GND
105	VDDOUT	–	Digital VDD (3.3V)
106	SDA0	O	Address output for external SDRAM
107	SDA1	O	Address output for external SDRAM
108	SDA2	O	Address output for external SDRAM
109	SDA3	O	Address output for external SDRAM
110	SDA4	O	Address output for external SDRAM
111	SDA5	O	Address output for external SDRAM
112	SDA6	O	Address output for external SDRAM
113	SDA7	O	Address output for external SDRAM
114	SDA8	O	Address output for external SDRAM
115	SDA9	O	Address output for external SDRAM
116	SDA10	O	Address output for external SDRAM
117	SDA11	O	Address output for external SDRAM
118	SDA12	O	Address output for external SDRAM
119	SDA13	O	Address output for external SDRAM
120	SDD0	I/O	Data input/output for external SDRAM
121	SDD1	I/O	Data input/output for external SDRAM
122	SDD2	I/O	Data input/output for external SDRAM
123	SDD3	I/O	Data input/output for external SDRAM
124	SDD4	I/O	Data input/output for external SDRAM
125	SDD5	I/O	Data input/output for external SDRAM
126	SDD6	I/O	Data input/output for external SDRAM
127	SDD7	I/O	Data input/output for external SDRAM
128	VSSOUT	–	Digital GND
129	VDDOUT	–	Digital VDD (3.3V)
130	SDD8	I/O	Data input/output for external SDRAM
131	SDD9	I/O	Data input/output for external SDRAM
132	SDD10	I/O	Data input/output for external SDRAM
133	SDD11	I/O	Data input/output for external SDRAM
134	SDD12	I/O	Data input/output for external SDRAM
135	SDD13	I/O	Data input/output for external SDRAM
136	SDD14	I/O	Data input/output for external SDRAM
137	SDD15	I/O	Data input/output for external SDRAM
138	SDCKE	I/O	Data input/output for external SDRAM
139	SDCLK	O	Data input/output for external SDRAM
140	SDDQMU	O	Data input/output for external SDRAM
141	SDXRAS	O	XRAS output for external SDRAM
142	SDXCAS	O	XCAS output for external SDRAM
143	SDXWE	O	XWE output for external SDRAM
144	VSSOUT	–	Digital GND

PD5948A8 (MAIN CONTROL ASSY: IC501) (For VSX-AX5i-S)

• Main Microcomputer

● Pin Assignment (Top view)


1 P96 12VTRIGGER
2 P95 NC
3 P94 1394 RST
4 P93 1394 CS
5 P92 1394 DO
6 P91 1394 DI
7 P90 1394 CK
8 BYTE GND
9 CMVSS GND
10 P87 NC
11 P86 NC
12 XRESET XRESET
13 XOUT XOUT
14 VSS GND
15 XIN XIN
16 VCC 5V
17 P85 NMI
18 P84 WAKEUP
19 P83 1394 INT
20 P82 1W WUP
21 P81 NC
22 P80 DISP EN
23 P77 OSD RST
24 P76 OSD CS
25 P75 OSD CONT
26 P74 DISP RST
27 P73 DISP RDY
28 P72 OSD/DISP CLK
29 P71 DISP DO
30 P70 OSD/DISP DI
31 P67 232C RXD
32 P66 232C TXD
33 P65 JIG CLK
34 P64 232C CTS
35 P63 DSP DI
36 P62 DSP DO
37 P61 DSP CLK
38 P60 DSP1 RST
39 P57 DSP2 RST
40 P56 DSP1 SS
41 P55 DSP2 SS
42 P54 DSP MODE1
43 P53 DSP MODE2
44 P52 DIR DI
45 P51 DIR DO
46 P50 DIR CS
47 P47 DIR CK
48 P46 DIR ERR
49 P45 DIR RST
50 P44 DECO MUTE
51 P43 DAC RST
52 P42 DSP MUTE
53 P41 M62429 DT
54 P40 M62429 CLK
55 P37 EVR CS
56 P36 EVR CLK
57 P35 EVR DT
58 P34 DSP HREQ1
59 P33 DSP HREQ2
60 P32 furniture
61 P31 NC
62 VCC 5V
63 P30 DC PROT
64 VSS GND
65 P27 RY AC
66 P26 AMUTE
67 P25 MR MUTE
68 P24 TC9274ST
69 P23 TC9274CK
70 P22 TC9274DT
71 P21 T-CLK
72 P20 T-CE
73 P17 OL DET
74 P16 T-DO
75 P15 RDS CLK
76 P14 T-DI
77 P13 RDS DT
78 P12 RDS FM+
79 P11 TMUTE
80 P10 STEREO
81 P07 TUNED
82 P06 EXP DT
83 P05 EXP CLK
84 P04 EXP OE
85 P03 EXP ST
86 P02 NC
87 P01 NC
88 P00 NC
89 P107 NC
90 P106 DEM LOCK
91 P105 SIMUKE1
92 P104 SIMUKE2
93 P103 WATT-IN
94 P102 TEMP-IN
95 P101 FAN STOP
96 AVSS GND
97 P100 NC
98 VREF 5V
99 AVCC 5V
100 P97 NC

Pin Function

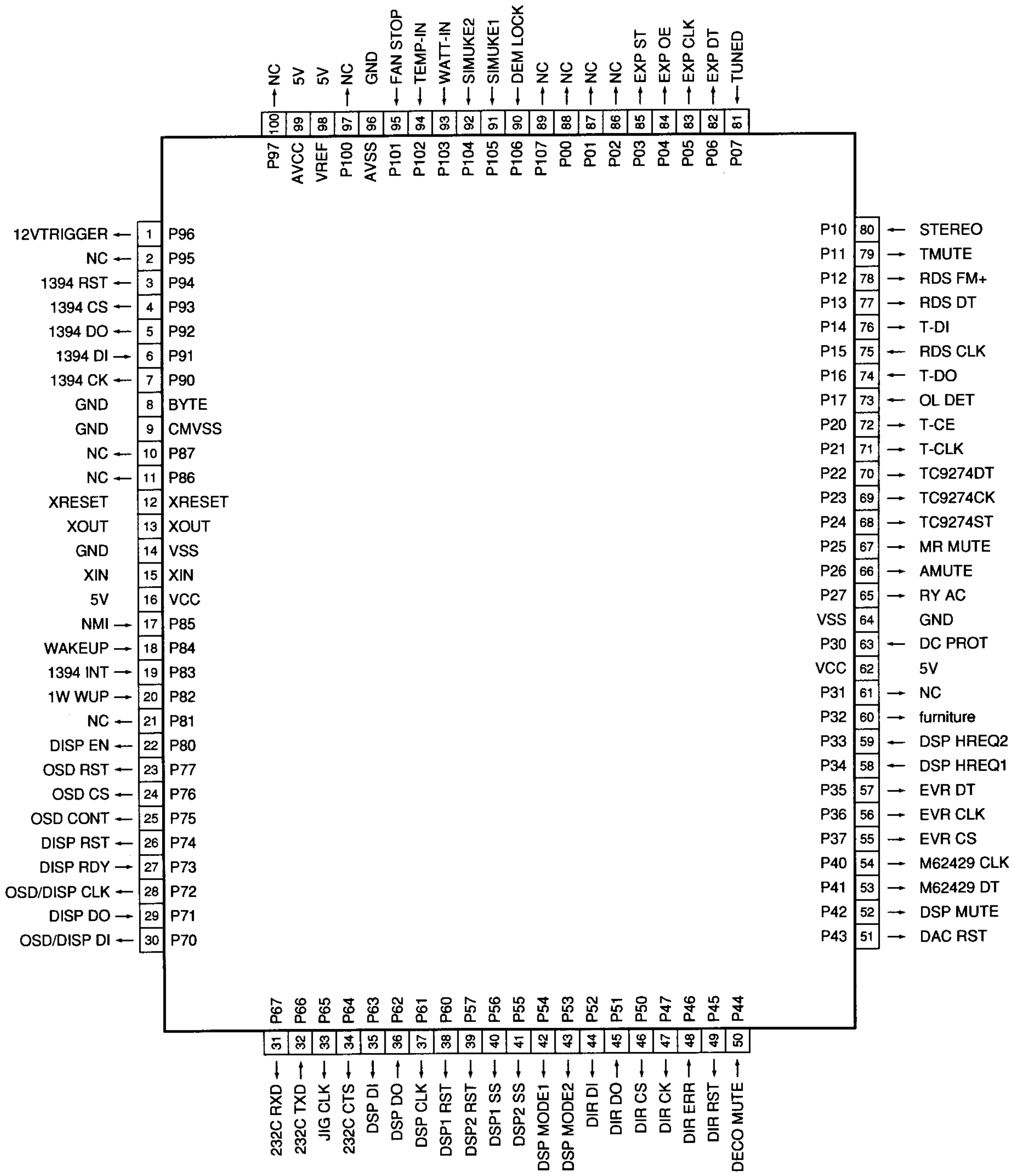
No.	Pin Name	I/O	Pin Function	Active
1	12VTRIGGER	O	"H" at ON	
2	–	O	NC "L" fixed.	
3	1394 RST	O	Reset for 1394	
4	1394 CS	O	Standby for 1394 (Not used) "L" fixed.	
5	1394 DO	O	DO for 1394	
6	1394 DI	I	DI for 1394	
7	1394 CK	O	CK for 1394	
8	GND	–	Ground	
9	CNVSS	–	5.1kΩ pulldown	
10	–	O	L" fixed	
11	–	O	L" fixed	
12	XRESET	–	Reset	
13	XOUT	–	Oscillator	
14	GND	–	Ground	
15	XIN	–	Oscillator	
16	5V	–	5V power supply	
17	NMI	I	Cannot use it as usual input port (100kΩ pullup)	
18	WAKEUP	I	Wakeup	H
19	1394 INT	I	INT for 1394	
20	1W WUP	I	Wakeup signal at standby (from the display microcomputer) (pulldown)	H
21	–	O	L" fixed	
22	DISP EN	O	Communication enabling signal to the display microcomputer	H
23	OSD RST	O	OSD-IC reset signal L: reset, H: release reset	
24	OSD CS	O	OSD-IC chip select signal	H
25	OSD CONT.	O	At data transfer to the OSD-IC: "H"	
26	DISP RST	O	Display microcomputer reset signal L: reset, H: release reset (pulldown)	
27	DISP RDY	I	Communication enabling signal from the display microcomputer	H
28	OSD/DISP CLK	O	Communication clock signal with the OSD-IC/display microcomputer	
29	DISP DO	I	Communication data in signal with the display microcomputer (N ch open drain)	
30	OSD/DISP DI	O	Communication data out signal with the OSD-IC/display microcomputer (N ch open drain: pullup)	
31	232C RXD	O	For 232C rewriting (data output)	
32	232C TXD	I	For 232C rewriting (data input)	
33	CLK	O	Not used	
34	232C CTS	O	For 232C rewriting (communication permission)	
35	DSP DI	O	Communication data out signal with the DSP1 microcomputer	
36	DSP DO	I	Communication data in signal with the DSP2 microcomputer	
37	DSP CLK	O	Communication clock signal with the DSP microcomputer	
38	DSP1 RST	O	DSP1 microcomputer reset signal L: reset, H: release reset	
39	DSP2 RST	O	DSP2 microcomputer reset signal L: reset, H: release reset	
40	DSP1 SS	O	Slave select signal to DSP1 microcomputer	L
41	DSP2 SS	O	Slave select signal to DSP2 microcomputer	L
42	DSP MODE1	O	Mode selection of DSP1 microcomputer (ROM/RAM) H: ROM mode, L: RAM (PPP) mode	H
43	DSP MODE2	O	Mode selection of DSP2 microcomputer (ROM/RAM) H: ROM mode, L: RAM (PPP) mode	H
44	DIR DI	O	Communication data out signal with the DIR	
45	DIR DO	I	Communication data in signal with the DIR/DAC	
46	DIR CS	O	Communication chip select signal with the DIR/DAC	
47	DIR CK	O	Communication clock signal with the DIR/DAC	
48	DIR ERR	I	Lock/Unlock signal	
49	DIR RST	O	DIR reset signal	
50	DECO MUTE	I	Boot success detecting port of 1st DSP	

No.	Pin Name	I/O	Pin Function	Active
51	DAC RST	O	DAC/AD reset	
52	DSP MUTE	O	DSP Assy mute	H
53	M62429 DT	O	Data signal for multi room volume IC control	
54	M62429 CLK	O	Clock signal for multi room volume IC control	
55	EVR CS	O	Chip select signal for erectronic volume	
56	EVR CLK	O	Clock signal for erectronic volume	
57	EVR DT	O	Data signal for erectronic volume	
58	DSP HREQ1	I	Error detection signal of DSP1 microcomputer	
59	DSP HREQ2	I	Error detection signal of DSP2 microcomputer	
60	furniture	O	Furniture control signal	
61	–	O	L" fixed	
62	5V	–	5V power supply	
63	DC PROT	I	DC detection L: Detection	L
64	GND	–	Ground	
65	RC-AC	O	AC relay ON/OFF	H
66	AMUTE	O	System mute L: Mute ON	L
67	MRMUTE	O	Multi room mute L: Mute ON	L
68	tc9274f-st	O	Function SW control (Strobe)	
69	tc9274f-ck	O	Function SW control (Clock)	
70	tc9274f-dt	O	Function SW control (Data)	
71	TUNER CLK	O	Clock signal of tuner control	
72	TUNER CE	O	Chip select signal of tuner control	
73	OL DET	I	Amp. overload detection L: Detection	L
74	TUNER DO	I	Data input signal of tuner control (pullup)	
75	RDS CLK	O	L" fixed	
76	TUNER DI	O	Data output signal of tuner control	
77	RDS DT	O	L" fixed	
78	RDS FM+	O	L" fixed	
79	TMUTE	O	Tuner mute	H
80	STEREO	I	L: STEREO (pullup)	L
81	TUNED	I	L: TUNED (pullup)	L
82	EXP DT	O	Data signal of expansion IC control	
83	EXP CLK	O	Clock signal of expansion IC control	
84	EXP OE	O	Output enable signal of expansion IC control	
85	EXP ST	O	Chip clock signal of expansion IC control	
86	–	O	NC	
87	–	O	NC	
88	–	O	NC	
89	–	O	NC	
90	DEM LOCK	I	Not used	
91	SIMUKE1	I	Destination read 1	
92	SIMUKE2	I	Destination read 2	
93	WATT-IN	I	Wattage detection Level detection with A/D	A/D
94	TEMP-IN	I	Temperature detection Level detection with A/D	A/D
95	FAN STOP	I	Fan forced stop detection	H
96	AVSS	–	Connect to VSS	
97	–	O	NC	L
98	VREF	–	Connect to VCC	
99	AVCC	–	Connect to VCC	
100	–	O	NC	

■ PD5899A (MAIN CONTROL ASSY: IC501) (For VSX-AX3-S, -K)

• Main Microcomputer

● Pin Assignment (Top view)


100 P97 ↑ NC
99 AVCC 5V
98 VREF 5V
97 P100 ↑ NC
96 AVSS GND
95 P101 ↓ FAN STOP
94 P102 ↓ TEMP-IN
93 P103 ↓ WATT-IN
92 P104 ↓ SIMUKE2
91 P105 ↓ SIMUKE1
90 P106 ↓ DEM LOCK
89 P107 ↑ NC
88 P00 ↑ NC
87 P01 ↑ NC
86 P02 ↑ NC
85 P03 ↑ EXP ST
84 P04 ↑ EXP OE
83 P05 ↑ EXP CLK
82 P06 ↑ EXP DT
81 P07 ↓ TUNED
12VTRIGGER ← 1 P96
NC ← 2 P95
1394 RST ← 3 P94
1394 CS ← 4 P93
1394 DO ← 5 P92
1394 DI → 6 P91
1394 CK ← 7 P90
GND 8 BYTE
GND 9 CMVSS
NC ← 10 P87
NC ← 11 P86
XRESET 12 XRESET
XOUT 13 XOUT
GND 14 VSS
XIN 15 XIN
5V 16 VCC
NMI → 17 P85
WAKEUP → 18 P84
1394 INT → 19 P83
1W WUP → 20 P82
NC ← 21 P81
DISP EN ← 22 P80
OSD RST ← 23 P77
OSD CS ← 24 P76
OSD CONT ← 25 P75
DISP RST ← 26 P74
DISP RDY → 27 P73
OSD/DISP CLK ← 28 P72
DISP DO → 29 P71
OSD/DISP DI ← 30 P70
P10 80 ← STEREO
P11 79 → TMUTE
P12 78 → RDS FM+
P13 77 → RDS DT
P14 76 → T-DI
P15 75 ← RDS CLK
P16 74 ← T-DO
P17 73 ← OL DET
P20 72 → T-CE
P21 71 → T-CLK
P22 70 → TC9274DT
P23 69 → TC9274CK
P24 68 → TC9274ST
P25 67 → MR MUTE
P26 66 → AMUTE
P27 65 → RY AC
VSS 64 GND
P30 63 ← DC PROT
VCC 62 5V
P31 61 → NC
P32 60 → furniture
P33 59 ← DSP HREQ2
P34 58 ← DSP HREQ1
P35 57 → EVR DT
P36 56 → EVR CLK
P37 55 → EVR CS
P40 54 → M62429 CLK
P41 53 → M62429 DT
P42 52 → DSP MUTE
P43 51 → DAC RST
P67 31 ↓ 232C RXD
P66 32 ↑ 232C TXD
P65 33 ↓ JIG CLK
P64 34 ↓ 232C CTS
P63 35 ↓ DSP DI
P62 36 ↑ DSP DO
P61 37 ↓ DSP CLK
P60 38 ↓ DSP1 RST
P57 39 ↓ DSP2 RST
P56 40 ↓ DSP1 SS
P55 41 ↓ DSP2 SS
P54 42 ↓ DSP MODE1
P53 43 ↓ DSP MODE2
P52 44 ↓ DIR DI
P51 45 ↑ DIR DO
P50 46 ↓ DIR CS
P47 47 ↓ DIR CK
P46 48 ↑ DIR ERR
P45 49 ↓ DIR RST
P44 50 ↑ DECO MUTE

● Pin Function

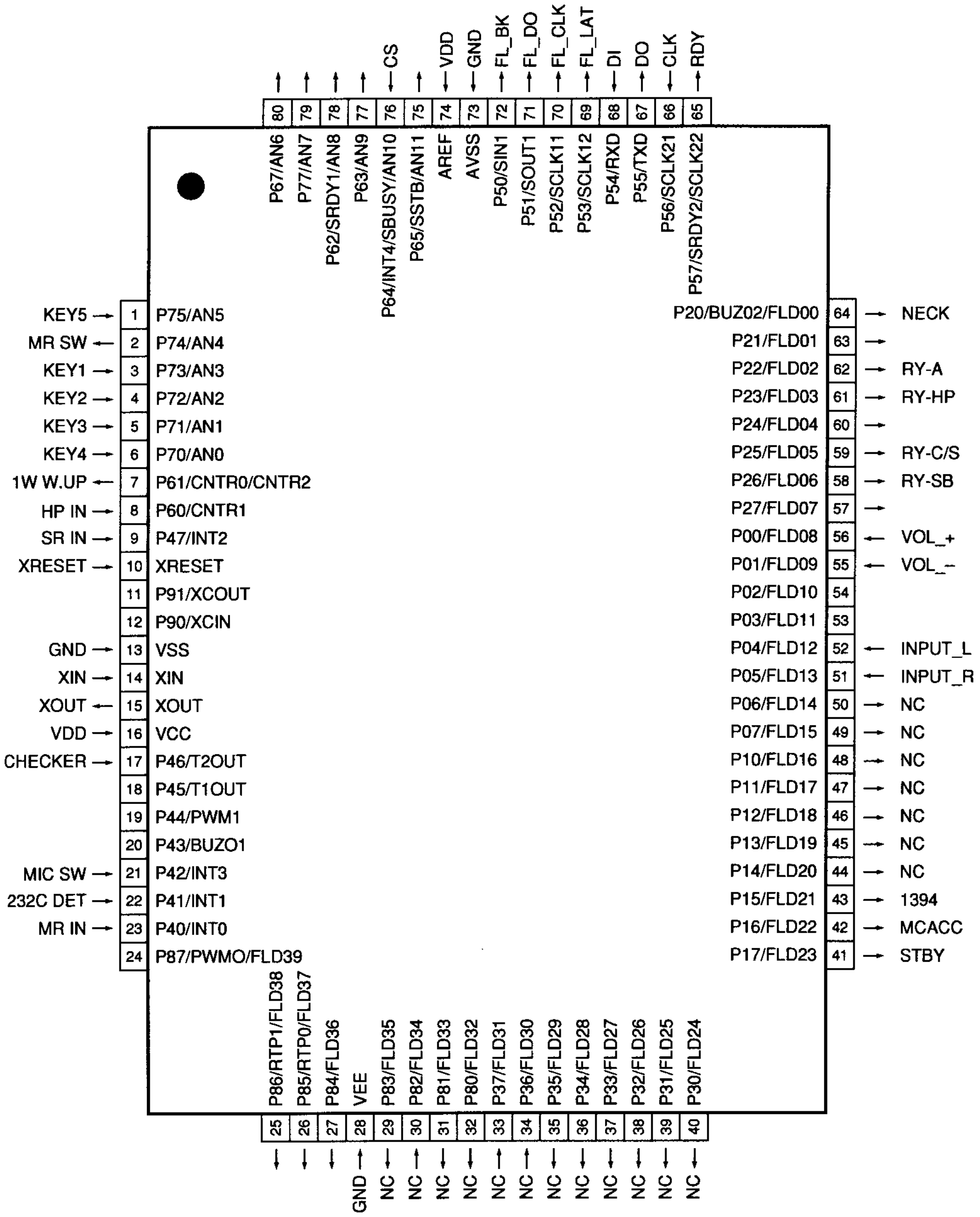
No.	Pin Name	I/O	Pin Function	Active
1	12VTRIGGER	O	"H" at ON	
2	–	O	NC "L" fixed.	
3	1394 RST	O	RST for 1394 (Not used) "L" fixed.	
4	1394 CS	O	Standby for 1394 (Not used) "L" fixed.	
5	1394 DO	O	DO for 1394 (Not used) "L" fixed.	
6	1394 DI	I	DI for 1394 (Not used) Standby with the circuit.	
7	1394 CK	O	CLK for 1394 (Not used) "L" fixed.	
8	GND	–	Ground	
9	CNVSS	–	5.1kΩ pulldown	
10	–	O	L" fixed	
11	–	O	L" fixed	
12	XRESET	–	Reset	
13	XOUT	–	Oscillator	
14	GND	–	Ground	
15	XIN	–	Oscillator	
16	5V	–	5V power supply	
17	NMI	I	Cannot use it as usual input port (100kΩ pullup)	
18	WAKEUP	I	Wakeup	H
19	1394 INT	I	INT for 1394 (Not used) Standby with the circuit.	
20	1W WUP	I	Wakeup signal at standby (from the display microcomputer) (pulldown)	H
21	–	O	L" fixed	
22	DISP EN	O	Communication enabling signal to the display microcomputer	H
23	OSD RST	O	OSD-IC reset signal L: reset, H: release reset	
24	OSD CS	O	OSD-IC chip select signal	H
25	OSD CONT.	O	At data transfer to the OSD-IC: "H"	
26	DISP RST	O	Display microcomputer reset signal L: reset, H: release reset (pulldown)	
27	DISP RDY	I	Communication enabling signal from the display microcomputer	H
28	OSD/DISP CLK	O	Communication clock signal with the OSD-IC/display microcomputer	
29	DISP DO	I	Communication data in signal with the display microcomputer (N ch open drain)	
30	OSD/DISP DI	O	Communication data out signal with the OSD-IC/display microcomputer (N ch open drain: pullup)	
31	232C RXD	O	For 232C rewriting (data output)	
32	232C TXD	I	For 232C rewriting (data input)	
33	CLK	O	Not used	
34	232C CTS	O	For 232C rewriting (communication permission)	
35	DSP DI	O	Communication data out signal with the DSP1 microcomputer	
36	DSP DO	I	Communication data in signal with the DSP2 microcomputer	
37	DSP CLK	O	Communication clock signal with the DSP microcomputer	
38	DSP1 RST	O	DSP1 microcomputer reset signal L: reset, H: release reset	
39	DSP2 RST	O	DSP2 microcomputer reset signal L: reset, H: release reset	
40	DSP1 SS	O	Slave select signal to DSP1 microcomputer	L
41	DSP2 SS	O	Slave select signal to DSP2 microcomputer	L
42	DSP MODE1	O	Mode selection of DSP1 microcomputer (ROM/RAM) H: ROM mode, L: RAM (PPP) mode	H
43	DSP MODE2	O	Mode selection of DSP2 microcomputer (ROM/RAM) H: ROM mode, L: RAM (PPP) mode	H
44	DIR DI	O	Communication data out signal with the DIR	
45	DIR DO	I	Communication data in signal with the DIR/DAC	
46	DIR CS	O	Communication chip select signal with the DIR/DAC	
47	DIR CK	O	Communication clock signal with the DIR/DAC	
48	DIR ERR	I	Lock/Unlock signal	
49	DIR RST	O	DIR reset signal	
50	DECO MUTE	I	Boot success detecting port of 1st DSP	

No.	Pin Name	I/O	Pin Function	Active
51	DAC RST	O	DAC/AD reset	
52	DSP MUTE	O	DSP Assy mute	H
53	M62429 DT	O	Data signal for multi room volume IC control	
54	M62429 CLK	O	Clock signal for multi room volume IC control	
55	EVR CS	O	Chip select signal for erectronic volume	
56	EVR CLK	O	Clock signal for erectronic volume	
57	EVR DT	O	Data signal for erectronic volume	
58	DSP HREQ1	I	Error detection signal of DSP1 microcomputer	
59	DSP HREQ2	I	Error detection signal of DSP2 microcomputer	
60	furniture	O	Furniture control signal	
61	–	O	L" fixed	
62	5V	–	5V power supply	
63	DC PROT	I	DC detection L: Detection	L
64	GND	–	Ground	
65	RC-AC	O	AC relay ON/OFF	H
66	AMUTE	O	System mute L: Mute ON	L
67	MRMUTE	O	Multi room mute L: Mute ON	L
68	tc9274f-st	O	Function SW control (Strobe)	
69	tc9274f-ck	O	Function SW control (Clock)	
70	tc9274f-dt	O	Function SW control (Data)	
71	TUNER CLK	O	Clock signal of tuner control	
72	TUNER CE	O	Chip select signal of tuner control	
73	OL DET	I	Amp. overload detection L: Detection	L
74	TUNER DO	I	Data input signal of tuner control (pullup)	
75	RDS CLK	O	L" fixed	
76	TUNER DI	O	Data output signal of tuner control	
77	RDS DT	O	L" fixed	
78	RDS FM+	O	L" fixed	
79	TMUTE	O	Tuner mute	H
80	STEREO	I	L: STEREO (pullup)	L
81	TUNED	I	L: TUNED (pullup)	L
82	EXP DT	O	Data signal of expansion IC control	
83	EXP CLK	O	Clock signal of expansion IC control	
84	EXP OE	O	Output enable signal of expansion IC control	
85	EXP ST	O	Chip clock signal of expansion IC control	
86	–	O	NC	
87	–	O	NC	
88	–	O	NC	
89	–	O	NC	
90	DEM LOCK	I	Not used	
91	SIMUKE1	I	Destination read 1	
92	SIMUKE2	I	Destination read 2	
93	WATT-IN	I	Wattage detection Level detection with A/D	A/D
94	TEMP-IN	I	Temperature detection Level detection with A/D	A/D
95	FAN STOP	I	Fan forced stop detection	H
96	AVSS	–	Connect to VSS	
97	–	O	NC	L
98	VREF	–	Connect to VCC	
99	AVCC	–	Connect to VCC	
100	–	O	NC	

PD5771B (DISPLAY ASSY: IC3000)

- **Display Microcomputer**

● Pin Assignment (Top view)


80 P67/AN6
79 P77/AN7
78 P62/SRDY1/AN8
77 P63/AN9
CS 76 P64/INT4/SBUSY/AN10
75 P65/SSTB/AN11
VDD 74 AREF
GND 73 AVSS
FL_BK 72 P50/SIN1
FL_DO 71 P51/SOUT1
FL_CLK 70 P52/SCLK11
FL_LAT 69 P53/SCLK12
DI 68 P54/RXD
DO 67 P55/TXD
CLK 66 P56/SCLK21
RDY 65 P57/SRDY2/SCLK22
KEY5 1 P75/AN5
MR SW 2 P74/AN4
KEY1 3 P73/AN3
KEY2 4 P72/AN2
KEY3 5 P71/AN1
KEY4 6 P70/AN0
1W W.UP 7 P61/CNTR0/CNTR2
HP IN 8 P60/CNTR1
SR IN 9 P47/INT2
XRESET 10 XRESET
11 P91/XCOUT
12 P90/XCIN
GND 13 VSS
XIN 14 XIN
XOUT 15 XOUT
VDD 16 VCC
CHECKER 17 P46/T2OUT
18 P45/T1OUT
19 P44/PWM1
20 P43/BUZO1
MIC SW 21 P42/INT3
232C DET 22 P41/INT1
MR IN 23 P40/INT0
24 P87/PWMO/FLD39
P20/BUZ02/FLD00 64 NECK
P21/FLD01 63
P22/FLD02 62 RY-A
P23/FLD03 61 RY-HP
P24/FLD04 60
P25/FLD05 59 RY-C/S
P26/FLD06 58 RY-SB
P27/FLD07 57
P00/FLD08 56 VOL_+
P01/FLD09 55 VOL_–
P02/FLD10 54
P03/FLD11 53
P04/FLD12 52 INPUT_L
P05/FLD13 51 INPUT_R
P06/FLD14 50 NC
P07/FLD15 49 NC
P10/FLD16 48 NC
P11/FLD17 47 NC
P12/FLD18 46 NC
P13/FLD19 45 NC
P14/FLD20 44 NC
P15/FLD21 43 1394
P16/FLD22 42 MCACC
P17/FLD23 41 STBY
P86/RTP1/FLD38 25
P85/RTP0/FLD37 26
P84/FLD36 27
VEE 28 GND
P83/FLD35 29 NC
P82/FLD34 30 NC
P81/FLD33 31 NC
P80/FLD32 32 NC
P37/FLD31 33 NC
P36/FLD30 34 NC
P35/FLD29 35 NC
P34/FLD28 36 NC
P33/FLD27 37 NC
P32/FLD26 38 NC
P31/FLD25 39 NC
P30/FLD24 40 NC

● Pin Function

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
1	KEY5	I	KEY AD input	41	STANDBY	O	Standby LED
2	MR SW	O	Multi room input Pioneer/others L: Pioneer	42	MCACC	O	MCACC LED
3	KEY1	I	KEY AD input	43	1394	O	1394 LED
4	KEY2			44	NC	O	Non connection
5	KEY3			45	NC		
6	KEY4			46	NC		
7	1W WUP	O	1W correspondence main wakeup	47	NC		
8	HP	I	Headphone detection (active: H)	48	NC		
9	SR IN	I	Remote control input of main room	49	NC		
10	RESET	–	Reset input from the main microcomputer	50	NC		
11	NC	O	Non connection	51	INPUT_R	I	Input selector RIGHT
12	NC			52	INPUT_L	I	Input selector LEFT
13	Vss	–	Ground	53	NC	O	Non connection
14	XIN	–	Oscillator	54	NC	O	Non connection
15	XOUT	–	Oscillator	55	VOL_–	I	Volume – direction
16	Vcc	–	Power supply 5V	56	VOL_+	I	Volume + direction
17	CHECKER	I	Checker mode detection (10kΩ pulldown)	57	NC	O	Non connection
18	NC	O	Non connection	58	RY-SB	O	Surround back/SP-B relay ON/OFF (active: H)
19	NC			59	RY-C/S	O	C/S relay ON/OFF (active: H)
20	NC			60	NC	O	Non connection
21	MIC SW	I	MIC detection	61	RY-HP	O	Headphone relay ON/OFF (active: H)
22	232C DET	I	232C signal input detection	62	RY-A	O	Speaker A relay ON/OFF (active: H)
23	MR IN	I	Remote control input of sub room (active: H)	63	NC	O	Non connection
24	NC	O	Non connection	64	NECK	O	6/8Ω switch L: 6Ω, H: 8Ω, Initial: 8Ω
25	NC	O	Non connection	65	RDY	O	Communication ready with main UCOM
26	NC			66	CLK	O	Communication clock with main UCOM
27	NC			67	DO	O	Communication data out with main UCOM
28	VEE	–	Ground	68	DI	I	Communication data in with main UCOM
29	NC	O	Non connection	69	FL_LAT	O	FL DRV LAT
30	NC			70	FL_CLK	O	FL DRV CLK
31	NC			71	FL_DO	O	FL DRV DATA
32	NC			72	FL_BK	O	FL DRV BK
33	NC			73	AVSS	–	Ground
34	NC			74	VREF	–	5V reference voltage
35	NC			75	NC	O	Non connection
36	NC			76	CS	I	Communication CS with main UCOM
37	NC			77	NC	O	Non connection
38	NC			78	NC		
39	NC			79	NC		
40	NC			80	NC		

BU4094BCF (MAIN CONTROL ASSY: IC502)

• Expansion IC

● Pin Function

No.	Pin Name	Pin Function	Active
1	DEM_STP	Demodulator oscillation OFF/ON	H
2	DEM_RST	Demodulator reset L: RESET	L
3	NJM2279_SW1	NJM2279 video control of sub room system	
4	NJM2279_SW2		H
5	NJM2596_SW2	NJM2596 video control of main system	H
6	NJM2596_SW3		H
7	NJM2596_SW4		H
8	NJM2596_SW5		

BU4094BCF (MAIN CONTROL ASSY: IC503)

• Expansion IC

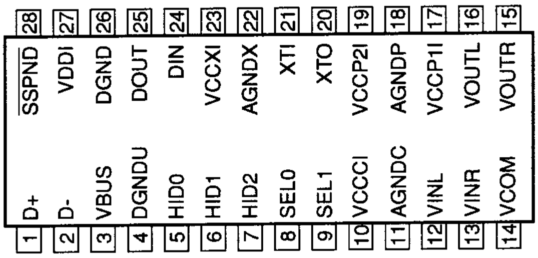
● Pin Function

No.	Pin Name	Pin Function	Active
1	OSD ON	ON at OSD on	H
2	TC9215_C34	Switch the DSP/DIRECT/MULTI CH IN of surround signal H: Multi ch input path	
3	PHONO GAIN	"H" at PHONO equalizer ON	H
4	DSDM	DSD DIRECT control (VSX-55TXi only)	
5	TC74HC4053_INH	Select the Component/D4 input (2 inputs → 1 output)	
6	TC74HC4053_A		
7	FAN DRIVE	ON when rotates the FAN	H
8	LOFAN	Not used "H" fixed	

■ PCM2902EG (COAXIAL IN ASSY: IC1681)

• USB Codec IC

● Pin Assignment (Top view)

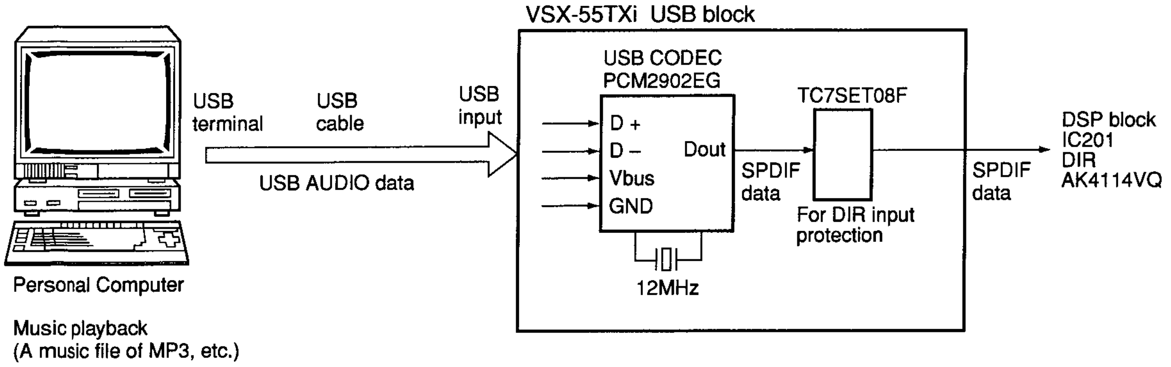

28 SSPND
27 VDDI
26 DGND
25 DOUT
24 DIN
23 VCCXI
22 AGNDX
21 XTI
20 XTO
19 VCCP2I
18 AGNDP
17 VCCP1I
16 VOUTL
15 VOUTR
1 D+
2 D-
3 VBUS
4 DGNDU
5 HID0
6 HID1
7 HID2
8 SEL0
9 SEL1
10 VCCCI
11 AGNDC
12 VINL
13 VINR
14 VCOM

● Pin Function

No.	Pin Name	I/O	Pin Function
1	D+	I/O	USB differential input/output plus(1)
2	D–	I/O	USB differential input/output minus(1)
3	VBUS	I	Connect to USB power (VBUS)
4	DGNDU	–	Digital ground for USB transceiver
5	HID0	I	HID key state input (mute), active high(3)
6	HID1	I	HID key state input (volume up), active high(3)
7	HID2	I	HID key state input (volume down), active high(3)
8	SEL0	I	Must be set to high(6)
9	SEL1	I	Must be set to high(6)
10	VCCCI	–	Internal analog power supply for codec(4)
11	AGNDC	–	Analog ground for codec
12	VINL	I	ADC analog input for L-channel
13	VINR	I	ADC analog input for R-channel
14	VCOM	–	Common for ADC/DAC (VCCCI/2) (4)
15	VOUTR	O	DAC Analog output for R-channel
16	VOUTL	O	DAC analog output for L-channel
17	VCCP1I	–	Internal analog power supply for PLL(4)
18	AGNDP	–	Analog ground for PLL
19	VCCP2I	–	Internal analog power supply for PLL(4)
20	XTO	O	Crystal oscillator output
21	XTI	I	Crystal oscillator input(2)
22	AGNDX	–	Analog ground for oscillator
23	VCCXI	–	Internal analog power supply for oscillator(4)
24	DIN	I	S/PDIF input(5)
25	DOUT	O	S/PDIF output
26	DGND	–	Digital ground
27	VDDI	–	Internal digital power supply(4)
28	SSPND	O	Suspend flag, active low (Low: suspend, High: operational)

(1) LV-TTL level
(2) 3.3-V CMOS level input
(3) 3.3-V CMOS level input with internal pulldown. This pin informs the PC of serviceable control signals such as mute, volume up, or volume down, which has no connection with the internal DAC or ADC directly. See the volume control and mute control section.
(4) Connect a decouple capacitor to GND
(5) 3.3-V CMOS level input with internal pulldown, 5 V tolerant
(6) TTL Schmitt trigger, 5 V tolerant

● Flow of USB Input Data



About PCM2902EG

- With codec of USB BUS POWERED, power is supplied from Vbus of USB, and work. (work with a power supply of VSX-55TXi irrelatively.)
- Be USB codec, but analog I/O and digital (SPDIF) input are not using in VSX-55TXi.
- When only connects to PC and receiver (VSX-55TXi) is turned on, the output of TC7SET08F outputs.

● Help of Non-failure Decision

Symptom when a sound is not output (Symptom is different by each OS)

- Confirm a driver whether PC is recognizing it. (With a device manager).
- Is a switch of sound sourse performed properly? (Control Panel, Sound or Multimedia)
- Is volume control of PC adjusted?
- How is other PC?
- In the state that does not change PC setting, is sound output in other VSX-55TXi?
- When uses CD-ROM and playback a music CD, and a sound is not output, is digital playback of CD-ROM checked?

When contain noise

- There is a bug in early USB AUDIO driver of WINDOWS XP, and contain noise once for several minutes. (Correspond with WINDOWS UPDATE.)
- An affinity problem with chip set
- Adaptation problem with chip set (refer to next item)
- Performance issue of PC. (Release resident software as measures.)
- Noise when using the other software during music playback. (Do not guarantee or do not use the other software)
- Do contain the same noise even if changes the PC?

Reference

Confirmation item of the USB part with Function checker.
Supply a power supply (+5V: pin 3, GND: pin 4) of IC1681 (PCM2902EG), and connect D+ (pin1) to GND.
Confirm that X1681 (ASS7047) starts oscillating.

Support OS	
Windows	98 / 98SE / ME
Windows	2000 Professional
Windows	XP Home / Professional

● Adaptation Problem with Chip Set

PCM2902EG caution of operation

Operating environment and findings of PCM2902EG

Evaluation PC: Libretto PAL2060 TNML made by Toshiba

(1) CPU: Crusoe 600MHz made by Transmeta
Use chip set: Transmeta N/B (North Bridge)
M1533 (South Bridge) made by ALi
OS: Windows ME

(2) CPU: Cerelon 566MHz made by Intel
Use chip set: Aladdin Pro 5 (North Bridge) and M1533 (South Bridge) made by ALi
OS: Windows ME

(3) CPU: K6-2 400MHz made by AMD
Use chip set: Aladdin 5 (North Bridge) and M1543 (South Bridge) made by ALi
OS: Windows ME

When contain noise by a problem of the chip set side, there is a problem in the PC side because even other USB audio equipment contains noise.

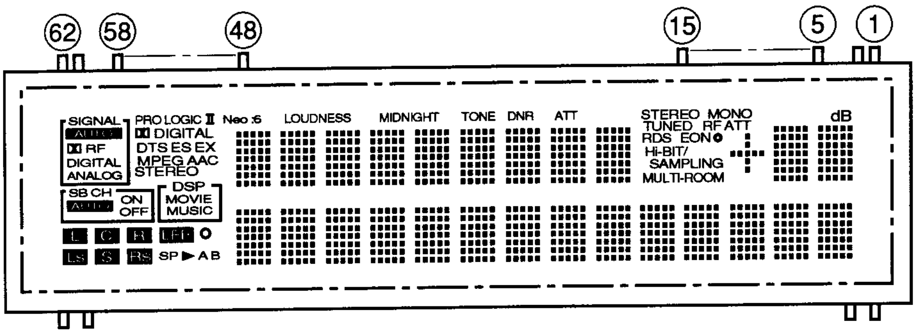
Therefore, do not recommend use in the condition and environment as mentioned above.

7.2.2 DISPLAY

■ AAV7087 (DISPLAY ASSY : V3000)

• FL DISPLAY

• Pin Assignment

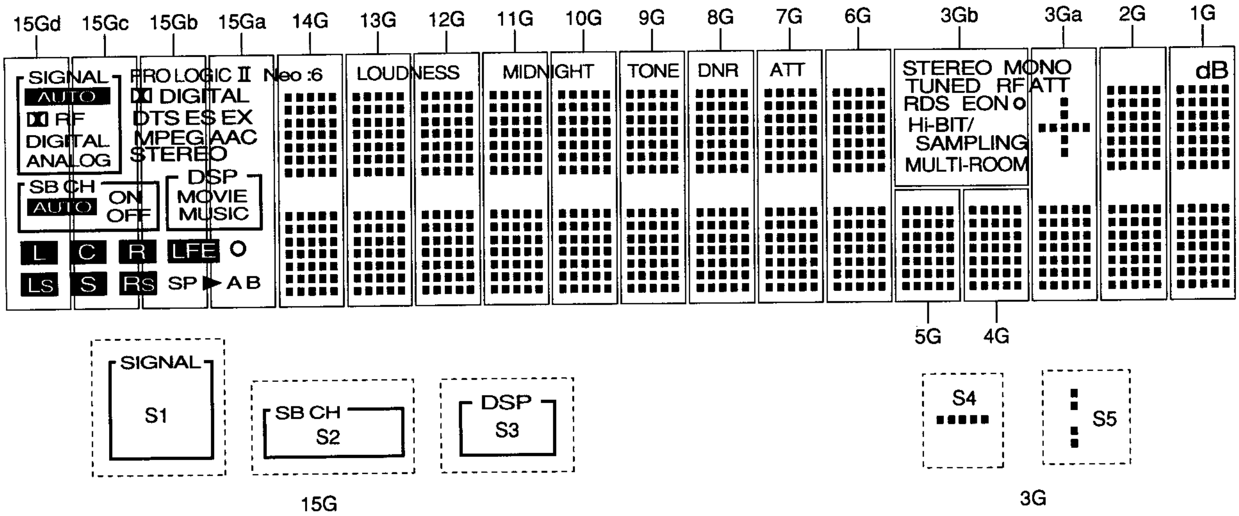

62
58
48
15
5
1
SIGNAL
AUTO
RF
DIGITAL
ANALOG
PRO LOGIC II
DIGITAL
DTS ES EX
MPEG AAC
STEREO
Neo :6
LOUDNESS
MIDNIGHT
TONE
DNR
ATT
STEREO MONO
TUNED RF ATT
RDS EON
Hi-BIT/
SAMPLING
MULTI-ROOM
dB
SB CH
AUTO
ON
OFF
DSP
MOVIE
MUSIC
L C R LFE
LS S RS SP ▶ A B

• Pin Connection

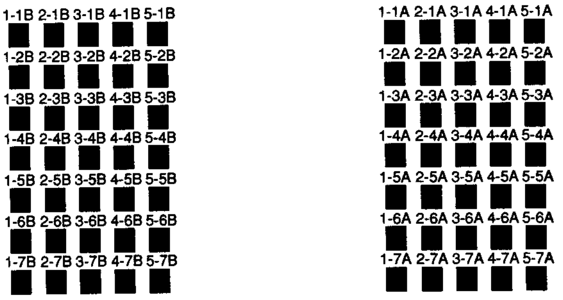
Pin No.	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47-3	2	1
Connection	F2	F2	NP	NP	GND	GND	NC	VH	NC	VDD	BK	LAT	CLK	SI	SO	NP	F1	F1

NOTE
1) F1, F2......... Filament
2) NP............. No pin (5-15 cut it by 2mm)
3) DL.............. Datum Line
4) GND........... GND pin
5) VH............. High Voltage Supply pin
6) VDD............ Logic Voltage Supply pin
7) NC............. No connection
(NC pin should be electrically open on the PC board)
8) BK............... Driver Output Blanking
9) LAT........... Latch Control Input
10) CLK........... Shift Register Clock
11) SI............... Serial Data Input
12) SO............. Serial Data Output
(to be open, if don't use)
13) Field of vision is a minimum of 21° from the lower side.

• Grid Assignment


15Gd
15Gc
15Gb
15Ga
14G
13G
12G
11G
10G
9G
8G
7G
6G
3Gb
3Ga
2G
1G
SIGNAL
AUTO
RF
DIGITAL
ANALOG
PRO LOGIC II
DIGITAL
DTS ES EX
MPEG AAC
STEREO
Neo :6
LOUDNESS
MIDNIGHT
TONE
DNR
ATT
STEREO MONO
TUNED RF ATT
RDS EON
Hi-BIT/
SAMPLING
MULTI-ROOM
dB
SB CH
AUTO
ON
OFF
DSP
MOVIE
MUSIC
L C R LFE
LS S RS SP ▶ A B
5G
4G
SIGNAL
S1
SB CH
S2
DSP
S3
15G
S4
S5
3G

• Segment Designation


1-1B 2-1B 3-1B 4-1B 5-1B
1-2B 2-2B 3-2B 4-2B 5-2B
1-3B 2-3B 3-3B 4-3B 5-3B
1-4B 2-4B 3-4B 4-4B 5-4B
1-5B 2-5B 3-5B 4-5B 5-5B
1-6B 2-6B 3-6B 4-6B 5-6B
1-7B 2-7B 3-7B 4-7B 5-7B
1-1A 2-1A 3-1A 4-1A 5-1A
1-2A 2-2A 3-2A 4-2A 5-2A
1-3A 2-3A 3-3A 4-3A 5-3A
1-4A 2-4A 3-4A 4-4A 5-4A
1-5A 2-5A 3-5A 4-5A 5-5A
1-6A 2-6A 3-6A 4-6A 5-6A
1-7A 2-7A 3-7A 4-7A 5-7A

(Lower stage)
(14G to 1G)

(Upper stage)
(14G to 6G, 2G, 1G)

• Anode Connection

	15Gd-15Ga	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3Gb, 3Ga	2G	1G
P1	Neo:6		LOUDNESS		MIDNIGHT		TONE	DNR	ATT	–	–	–	STEREO	–	dB
P2	PROLOGIC	1-1A	1-1A	1-1A	1-1A	1-1A	1-1A	1-1A	1-1A	1-1A	–	–	MONO	1-1A	1-1A
P3	Ⅱ	2-1A	2-1A	2-1A	2-1A	2-1A	2-1A	2-1A	2-1A	2-1A	–	–	TUNED	2-1A	2-1A
P4	S1	3-1A	3-1A	3-1A	3-1A	3-1A	3-1A	3-1A	3-1A	3-1A	–	–	RF ATT	3-1A	3-1A
P5	AUTO	4-1A	4-1A	4-1A	4-1A	4-1A	4-1A	4-1A	4-1A	4-1A	–	–	RDS	4-1A	4-1A
P6	DD RF	5-1A	5-1A	5-1A	5-1A	5-1A	5-1A	5-1A	5-1A	5-1A	–	–	EON	5-1A	5-1A
P7	DIGITAL	1-2A	1-2A	1-2A	1-2A	1-2A	1-2A	1-2A	1-2A	1-2A	–	–	○	1-2A	1-2A
P8	ANALOG	2-2A	2-2A	2-2A	2-2A	2-2A	2-2A	2-2A	2-2A	2-2A	–	–	HI-BIT/ SAMPLING	2-2A	2-2A
P9	DD DIGITAL	3-2A	3-2A	3-2A	3-2A	3-2A	3-2A	3-2A	3-2A	3-2A	–	–	S4	3-2A	3-2A
P10	DTS	4-2A	4-2A	4-2A	4-2A	4-2A	4-2A	4-2A	4-2A	4-2A	–	–	S5	4-2A	4-2A
P11	ES	5-2A	5-2A	5-2A	5-2A	5-2A	5-2A	5-2A	5-2A	5-2A	–	–	–	5-2A	5-2A
P12	EX	1-3A	1-3A	1-3A	1-3A	1-3A	1-3A	1-3A	1-3A	1-3A	–	–	–	1-3A	1-3A
P13	MPEG	2-3A	2-3A	2-3A	2-3A	2-3A	2-3A	2-3A	2-3A	2-3A	–	–	–	2-3A	2-3A
P14	AAC	3-3A	3-3A	3-3A	3-3A	3-3A	3-3A	3-3A	3-3A	3-3A	–	–	–	3-3A	3-3A
P15	STEREO	4-3A	4-3A	4-3A	4-3A	4-3A	4-3A	4-3A	4-3A	4-3A	–	–	–	4-3A	4-3A
P16	S2	5-3A	5-3A	5-3A	5-3A	5-3A	5-3A	5-3A	5-3A	5-3A	–	–	–	5-3A	5-3A
P17	AUTO	1-4A	1-4A	1-4A	1-4A	1-4A	1-4A	1-4A	1-4A	1-4A	–	–	–	1-4A	1-4A
P18	ON	2-4A	2-4A	2-4A	2-4A	2-4A	2-4A	2-4A	2-4A	2-4A	–	–	–	2-4A	2-4A
P19	OFF	3-4A	3-4A	3-4A	3-4A	3-4A	3-4A	3-4A	3-4A	3-4A	–	–	–	3-4A	3-4A
P20	S3	4-4A	4-4A	4-4A	4-4A	4-4A	4-4A	4-4A	4-4A	4-4A	–	–	–	4-4A	4-4A
P21	MOVIE	5-4A	5-4A	5-4A	5-4A	5-4A	5-4A	5-4A	5-4A	5-4A	–	–	–	5-4A	5-4A
P22	MUSIC	1-5A	1-5A	1-5A	1-5A	1-5A	1-5A	1-5A	1-5A	1-5A	–	–	–	1-5A	1-5A
P23	L	2-5A	2-5A	2-5A	2-5A	2-5A	2-5A	2-5A	2-5A	2-5A	–	–	–	2-5A	2-5A
P24	C	3-5A	3-5A	3-5A	3-5A	3-5A	3-5A	3-5A	3-5A	3-5A	–	–	–	3-5A	3-5A
P25	R	4-5A	4-5A	4-5A	4-5A	4-5A	4-5A	4-5A	4-5A	4-5A	–	–	–	4-5A	4-5A
P26	LS	5-5A	5-5A	5-5A	5-5A	5-5A	5-5A	5-5A	5-5A	5-5A	–	–	–	5-5A	5-5A
P27	S	1-6A	1-6A	1-6A	1-6A	1-6A	1-6A	1-6A	1-6A	1-6A	–	–	–	1-6A	1-6A
P28	RS	2-6A	2-6A	2-6A	2-6A	2-6A	2-6A	2-6A	2-6A	2-6A	–	–	–	2-6A	2-6A
P29	LFE	3-6A	3-6A	3-6A	3-6A	3-6A	3-6A	3-6A	3-6A	3-6A	–	–	–	3-6A	3-6A
P30	○	4-6A	4-6A	4-6A	4-6A	4-6A	4-6A	4-6A	4-6A	4-6A	–	–	–	4-6A	4-6A
P31	SP ▶	5-6A	5-6A	5-6A	5-6A	5-6A	5-6A	5-6A	5-6A	5-6A	–	–	–	5-6A	5-6A
P32	A	1-7A	1-7A	1-7A	1-7A	1-7A	1-7A	1-7A	1-7A	1-7A	–	–	–	1-7A	1-7A
P33	B	2-7A	2-7A	2-7A	2-7A	2-7A	2-7A	2-7A	2-7A	2-7A	–	–	–	2-7A	2-7A
P34	–	3-7A	3-7A	3-7A	3-7A	3-7A	3-7A	3-7A	3-7A	3-7A	–	–	–	3-7A	3-7A
P35	–	4-7A	4-7A	4-7A	4-7A	4-7A	4-7A	4-7A	4-7A	4-7A	–	–	–	4-7A	4-7A
P36	–	5-7A	5-7A	5-7A	5-7A	5-7A	5-7A	5-7A	5-7A	5-7A	–	–	–	5-7A	5-7A
P37	–	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B	1-1B
P38	–	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B	2-1B
P39	–	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B	3-1B
P40	–	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B	4-1B
P41	–	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B	5-1B
P42	–	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B	1-2B
P43	–	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B	2-2B
P44	–	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B	3-2B
P45	–	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B	4-2B
P46	–	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B	5-2B
P47	–	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B	1-3B
P48	–	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B	2-3B
P49	–	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B	3-3B
P50	–	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B	4-3B
P51	–	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B	5-3B
P52	–	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B	1-4B
P53	–	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B	2-4B
P54	–	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B	3-4B
P55	–	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B	4-4B
P56	–	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B	5-4B
P57	–	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B	1-5B
P58	–	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B	2-5B
P59	–	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B	3-5B
P60	–	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B	4-5B
P61	–	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B	5-5B
P62	–	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B	1-6B
P63	–	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B	2-6B
P64	–	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B	3-6B
P65	–	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B	4-6B
P66	–	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B	5-6B
P67	–	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B	1-7B
P68	–	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B	2-7B
P69	–	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B	3-7B
P70	–	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B	4-7B
P71	–	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B	5-7B

• Anode Timing Chart

<table>
<tr><th></th><th>15Gd-15Ga</th><th>14G</th><th>13G</th><th>12G</th><th>11G</th><th>10G</th><th>9G</th><th>8G</th><th>7G</th><th>6G</th><th>5G</th><th>4G</th><th>3Gb, 3Ga</th><th>2G</th><th>1G</th></tr>
<tr><td>P1</td><td colspan="2">T18</td><td colspan="2">T17</td><td colspan="2">T16</td><td>T9</td><td>T8</td><td>T7</td><td>–</td><td>–</td><td>–</td><td>T3</td><td>–</td><td>T1</td></tr>
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</table>

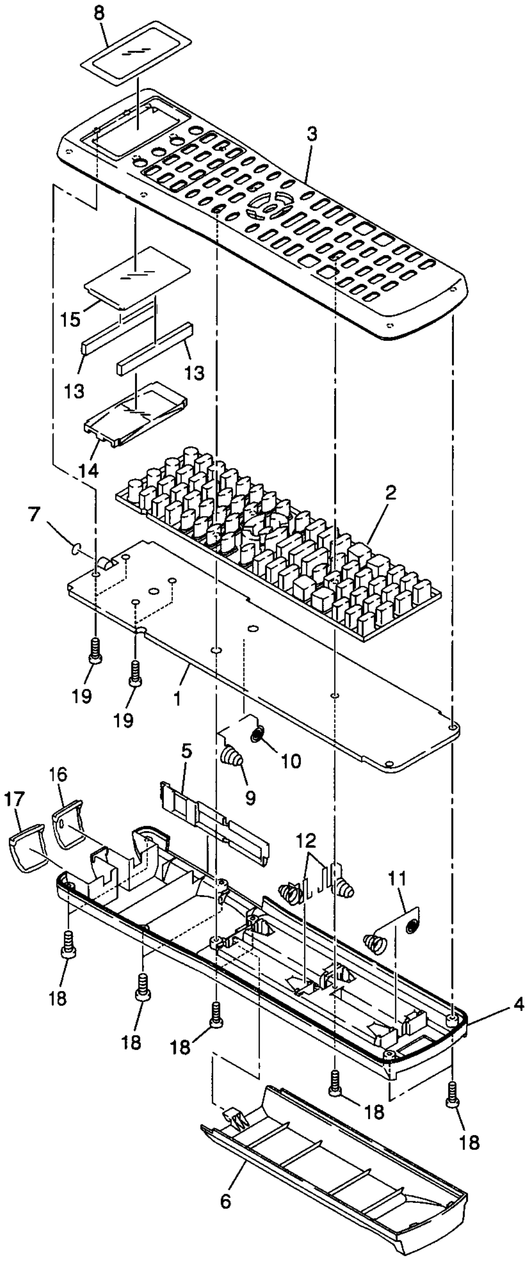
7.3 CLEANING

Before shipping out the product, be sure to clean the following positions by using the prescribed cleaning tools:

Position to be cleaned	**Cleaning tools**
Fans	Cleaning paper : GED-008

7.4 REMOTE CONTROL UNIT

7.4.1 EXPLODED VIEWS AND PARTS LIST (VSX-AX5i-S: AXD7364)



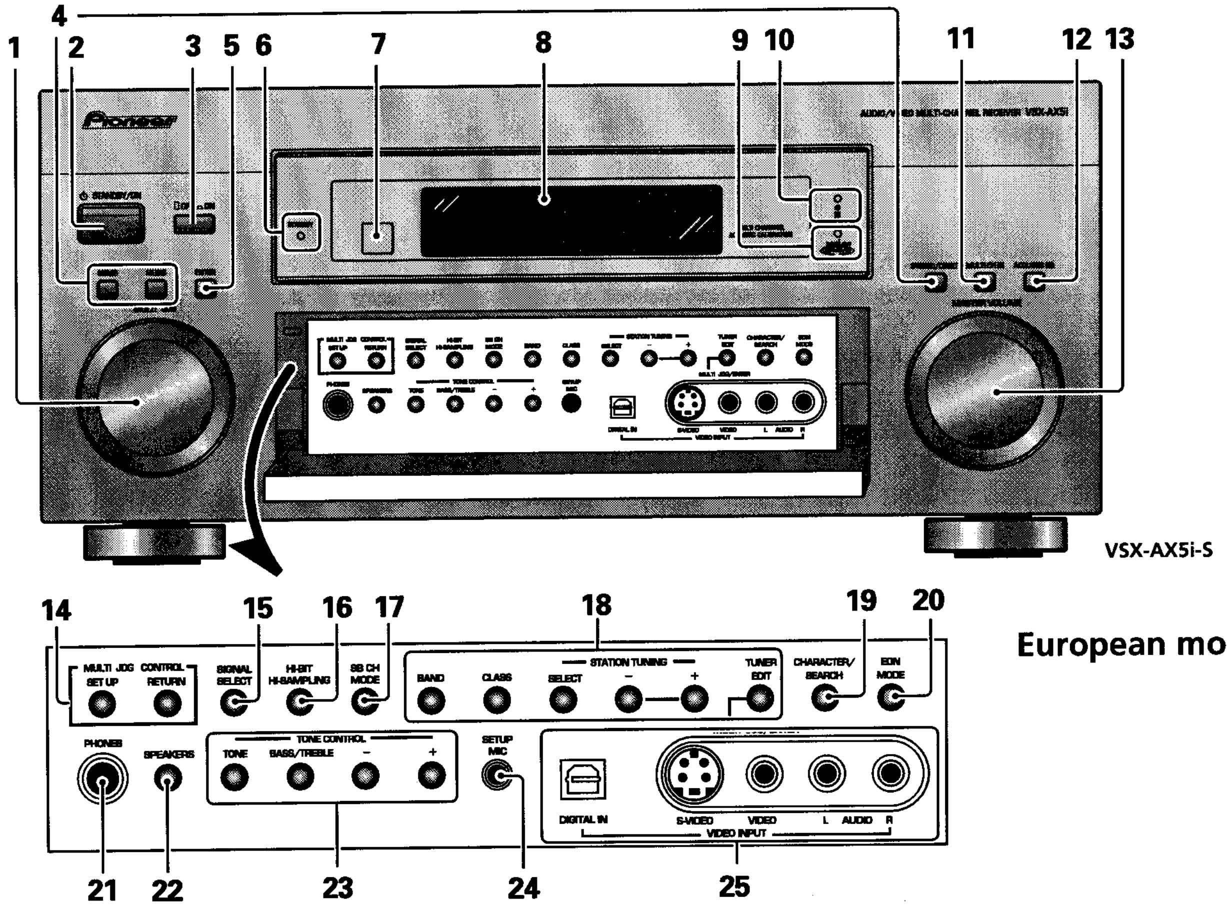
Mark	No.	Description	Part No.
	1	PCB Assy	AZC7301
	2	Rubber Key	AZA7425
	3	Case A	AZN7938
	4	Case B	AZN7939
	5	Frame	AZN7941
	6	Battery Cover	AZN7940
	7	MIC Cap	AZN7942
	8	Name Plate	201RRC-314-01L
	9	Terminal A	411RRC-212-01G
	10	Terminal B	411RRC-213-01G
	11	Battery Terminal	413RRC-143-01R
	12	Spring	413RRC-171-01G

Mark	No.	Description	Part No.
	13	Connector	423RRC-046-01G
	14	Plate	481RRC-018-01G
	15	Shield Plate	801RRC-020-01L
	16	Filter A	811RRC-109-01G
	17	Filter B	811RRC-110-01G
	18	Screw	A-BA2008-225002
	19	Screw	A-BJ2006

8. PANEL FACILITIES

8.1 FRONT PANEL

All the controls on the front panel are explained and/or referenced here. To open the front panel push gently on the lower third of the panel.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20
MULTI JOG CONTROL
SET UP
RETURN
SIGNAL SELECT
HI-BIT HI-SAMPLING
SB CH MODE
STATION TUNING
BAND
CLASS
SELECT
–
+
TUNER EDIT
CHARACTER/ SEARCH
EON MODE
PHONES
SPEAKERS
TONE CONTROL
TONE
BASS/TREBLE
SETUP MIC
DIGITAL IN
S-VIDEO
VIDEO
L AUDIO R
VIDEO INPUT
21
22
23
24
25

European model

1 **MULTI JOG dial**
You can use this dial for many purposes. When you press the SET UP button (14), you can use it to perform SYSTEM SETUP operations; select a function or a listening mode or do TUNER EDIT functions (in TUNER mode).

2 **⏻STANDBY/ON button**
Press to switch the receiver ON or into STANDBY mode.

3 **■OFF ▁ON button**
Press to switch the receiver between OFF and STANDBY mode or ON.

4 **Listening mode buttons**
There are two types of SURROUND modes:
MOVIE: Press to put the receiver into MOVIE mode.
MUSIC: Press to put the receiver into MUSIC mode.
STEREO/DIRECT: Switches the receiver into STEREO mode if it was in a different sound mode or toggles between DIRECT and STEREO mode.

5 **ENTER button**
Use this button to enter information concerning the SYSTEM SETUP, listening mode or the tuner.

6 **STANDBY indicator**
Lights when the receiver is in STANDBY mode.

7 **Remote sensor**
Receives the signals from the remote control.

8 Display

9 MCACC indicator

Lights when the ACOUSTIC CAL EQ is on. (After the Auto Surround Sound Setup has been completed the ACOUSTIC CAL EQ is set on and this display will light.)

10 i.LINK indicator (VSX-AX5i-S only)

Lights when an i.LINK -Audio-equipped component is selected.

11 MULTI CH IN button

Use this button to select the component you have hooked up to the MULTI CH IN terminals (for example, a DVD-Audio player).

12 ACOUSTIC EQ button

Press to switch on/off and select the type of acoustic calibration EQ.

13 MASTER VOLUME dial

Use to raise or lower the volume of the receiver.

14 MULTI JOG CONTROL buttons

SET UP: Press to switch the SYSTEM SETUP mode.

RETURN: Press to move back one step in the SYSTEM SETUP process.

15 SIGNAL SELECT button

Press SIGNAL SELECT repeatedly to select one of the following:

AUTO: If there are analog and digital signals input, the receiver automatically selects the digital signal.

DIGITAL: To select an optical or coaxial digital signal.

ANALOG: To select an analog signal.

16 HI-BIT HI-SAMPLING button

Use this button to switch the AUDIO SCALER mode on or off.

17 SB CH MODE button

Use this button to turn the surround back channels ON/OFF/AUTO or switch the virtual surround back mode between ON/OFF/AUTO.

18 Tuner control buttons

BAND: Press to select the AM or FM band.

CLASS: Press repeatedly to switch the preset station classes.

SELECT: Switches the ñ/+ buttons between station memory and frequency select modes.

–/+: Selects station memories or frequencies when using the tuner.

TUNER EDIT: Press to memorize and name a station for recall using the MULTI JOG and ENTER buttons.

19 CHARACTER/SEARCH button

Use to search for different program types in RDS mode.

20 EON MODE button

Use to search for different programs that are transmitting traffic or news information.

21 PHONES jack

Connect headphones for private listening (no sound will be heard through the speakers).

22 SPEAKERS (A/B) button

The use of this button depends on how the SURRBACK SYSTEM is set. If NORMAL SYSTEM is chosen this button toggles between A and OFF. If SECOND ZONE is chosen this button toggles between A, B, A+B and OFF. If FRONT BI-AMP is chosen this button toggles between A+B and OFF.

23 TONE CONTROL buttons

TONE button: This button switches between TONE on and off, which bypasses the tone circuitry.

BASS/TREBLE button: Use to select whether the bass or treble will be adjusted.

–/+ buttons: Use to adjust the frequency levels.

24 SETUP MIC jack

Plug in the setup mic here. This is very important in order to set up your system and get proper surround sound.

25 VIDEO INPUT jacks

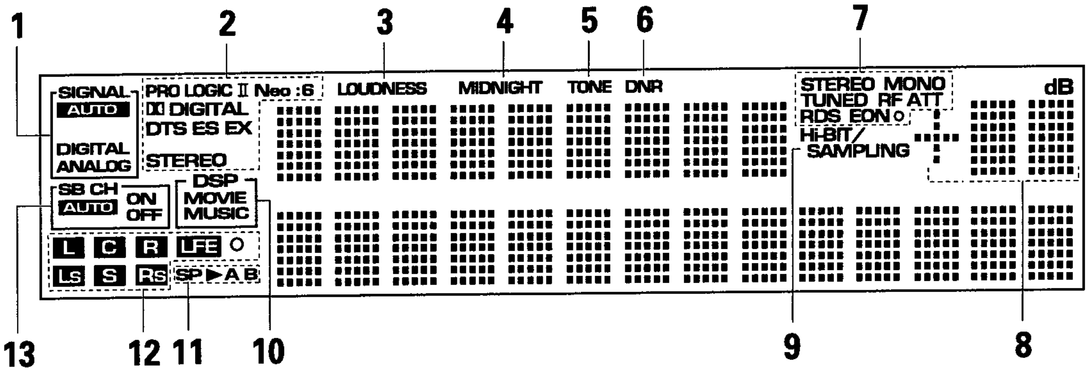
DIGITAL IN: Digital input for connecting a game console, DVD player or video camera (etc.), that has an optical digital connection.

S-VIDEO: Video input for connecting a portable DVD player or video camera (etc.), that has an S video out.

VIDEO / AUDIO (L/R): Video input for connecting a portable DVD player or video camera (etc.), that has standard video/audio outputs.

8.2 DISPLAY

All the display information is explained and/or referenced here.



1 SIGNAL indicators

Light to indicate the input signal you selected.

AUTO: Lights when the receiver is set to select the input signal automatically.

DIGITAL: Lights when digital audio signals are selected.

ANALOG: Lights when analog signals are selected.

2 Digital format indicators

PRO LOGIC II: Lights during Dolby Pro Logic II processing.

NEO:6: Lights during NEO:6 processing.

DD DIGITAL: Lights when a Dolby Digital signal is detected.

DTS: Lights when a DTS signal is detected.

ES: Lights when playing back a DTS ES signal.

EX: Lights when playing back a Dolby Digital EX signal.

STEREO: Lights during two-channel playback.

3 LOUDNESS indicator

Lights when LOUDNESS is on.

4 MIDNIGHT indicator

Lights when MIDNIGHT is on.

5 TONE indicator

Lights when the TONE control is on.

6 DNR indicator

Lights when DIGITAL NR is on.

7 TUNER indicators

STEREO: Lights when an FM stereo broadcast is received in the auto stereo mode.

MONO: Lights when the tuner is set to receive FM broadcasts and when MPX mode is selected.

TUNED: Lights when a broadcast is received.

RF ATT (European model only)**:** Lights when the RF ATT is on.

RDS (European model only)**:** Lights when an RDS broadcast is received.

EON o (European model only)**:** EON lights when it has been set. The dot indicator next to it lights when the station you are currently tuned to carries the EON data service.

8 Volume level indicator

9 Hi-BIT/SAMPLING indicator

Lights when the AUDIO SCALER mode is on.

10 DSP indicators

MOVIE: Lights when a MOVIE mode is selected. When a DSP MOVIE mode is selected DSP will light with a box around it.

MUSIC: Lights when a MUSIC mode is selected. When a DSP MUSIC mode is selected DSP will light with a box around it.

11 Speaker indicators

Lights to indicate the current speaker system, A and/or B.

12 Program Format indicators

For Dolby Digital or DTS sources: These indicators change according to which channels are active in the source. When all three **LS** (left surround), **S** (surround) and **RS** (right surround) light at the same time it means a source with a 6.1 channel playback flag is being used.

L – Left front channel.

C – Center channel.

R – Right front channel.

LS – Left surround channel.

S – Surround channel or Surround back channel.

RS – Right surround channel.

LFE – Low Frequency Effects channel.

o – Lights when LFE signal is input.

13 SB CH indicators

Light to indicate the status of the surround back channels.

AUTO – Lights when the SB CH MODE or virtual surround back mode is set to AUTO.

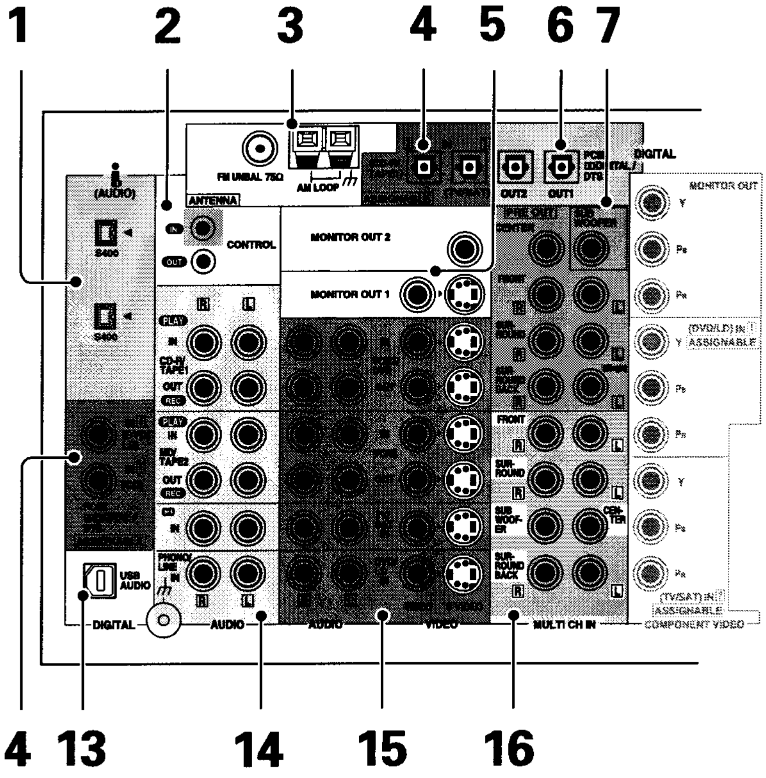
ON – Lights when the SB CH MODE or virtual surround back mode is set to ON.

OFF – Lights when the SB CH MODE or virtual surround back mode is set to OFF.

8.3 REAR PANEL

■ VSX-AX5i-S

All the terminals on the back panel are explained and/or referenced here.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(AUDIO)
S400
S400
ANTENNA
FM UNBAL 75Ω
AM LOOP
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CONTROL
MONITOR OUT 2
MONITOR OUT 1
DIGITAL
OUT2
OUT1
PCM DOLBY DIGITAL DTS
PRE OUT
CENTER
SUB WOOFER
FRONT
SUR-ROUND
SUR-ROUND BACK
MONITOR OUT
Y
PB
PR
(DVD/LD) IN
ASSIGNABLE
PLAY
IN
CD-R/TAPE1
OUT
REC
MD/TAPE2
CD
PHONO/LINE
R
L
USB AUDIO
DIGITAL
AUDIO
VIDEO
S VIDEO
MULTI CH IN
CEN-TER
SUB WOOF-ER
(TV/SAT) IN
ASSIGNABLE
COMPONENT VIDEO
4
13
14
15
16

1 i (AUDIO) - i.LINK connectors
4-pin, S400 i.LINK connectors for connection to i.LINK-equipped players and other components. Each i.LINK connector acts simultaneously as both input and output.

2 CONTROL IN/OUT terminals
You can use these jacks to hook up other PIONEER equipment, that has a CONTROL terminal, so that you can control them all by pointing the remote control(s) at one remote sensor.

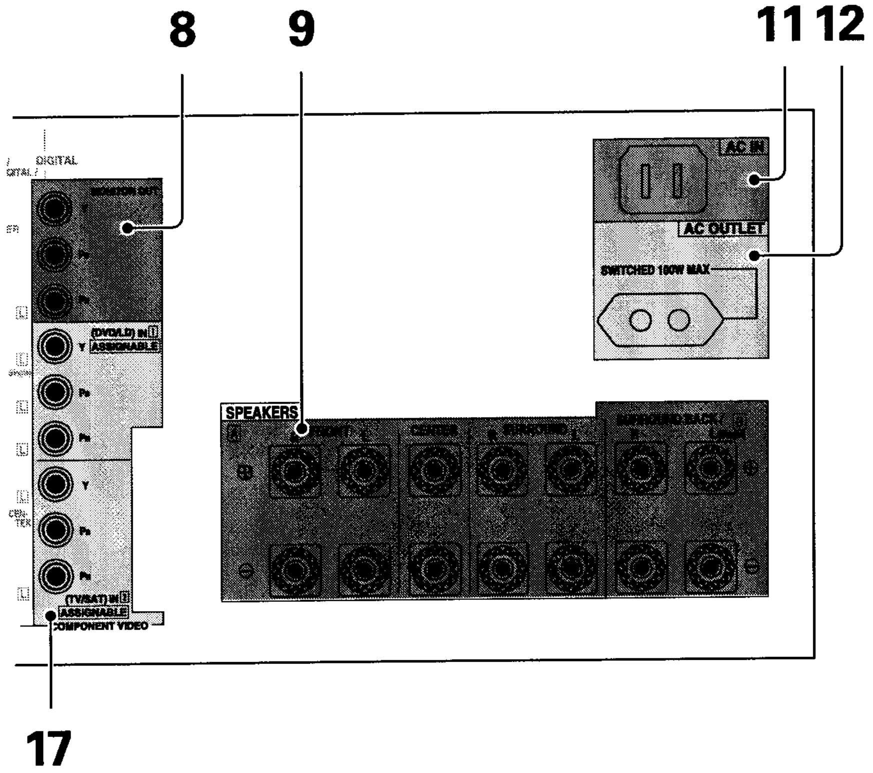
3 Radio antenna terminals
Hook up antennas for the radio tuner built into the receiver here.

4 DIGITAL IN terminals
Use these terminals to input the signal from a DVD, CD player or any other kind of digital player. To be able to play Dolby Digital and other surround soundtracks you need to make digital connections. To do this use the digital terminals here. If you don't connect as per the default settings you need to complete "Assigning the Digital Inputs" .

5 MONITOR OUT 1 & 2 terminals (connect a TV or monitor here)
Use either of these terminals to output the video signal to your TV(s), video projector(s) or monitor(s). The on-screen displays to setup the receiver will only be output through MONITOR OUT 1.

6 DIGITAL OUT terminals
Use these terminals to output a digital signal to a DVD-R, CD-R, MD recorder or any other kind of digital recorder.

7 PRE OUT analog terminals (connect an amplifier here)
Use these terminals to output the audio signal from this amplifier to a different amplifier if that's how you choose to set up your system.



8 COMPONENT VIDEO MONITOR OUT terminals

Use these terminals to output the video signal from the COMPONENT VIDEO IN terminals to your TV.

9 SPEAKERS terminals

Use these terminals to connect speakers to the receiver. The FRONT, CENTER and SURROUND terminals are for the main speaker system and the SURROUND BACK speakers can be set to either the main system, the SECOND ZONE, or the FRONT BI-AMP.

11 AC IN

Hook up the power cord to this terminal.

12 AC OUTLET (switched, 100 W max)

Hook up an external component to the power supply of this receiver. Only do this with audio or video components being used in this system and never hook up heavy equipment (like TVs, heaters, air conditioners, refrigerators, etc.) to this receiver.

13 USB AUDIO terminal

Use this terminal to connect a PC to this receiver.

14 Audio input/output terminals (connect analog components here)

Use these terminals to input/output the audio signal from analog components (like a cassette deck or turntable). These are analog jacks.

15 Video components input/output terminals

Input/output signals from your video components (DVD, VCR, TV tuners, SAT tuners, etc.) here.

16 MULTI CH IN terminals

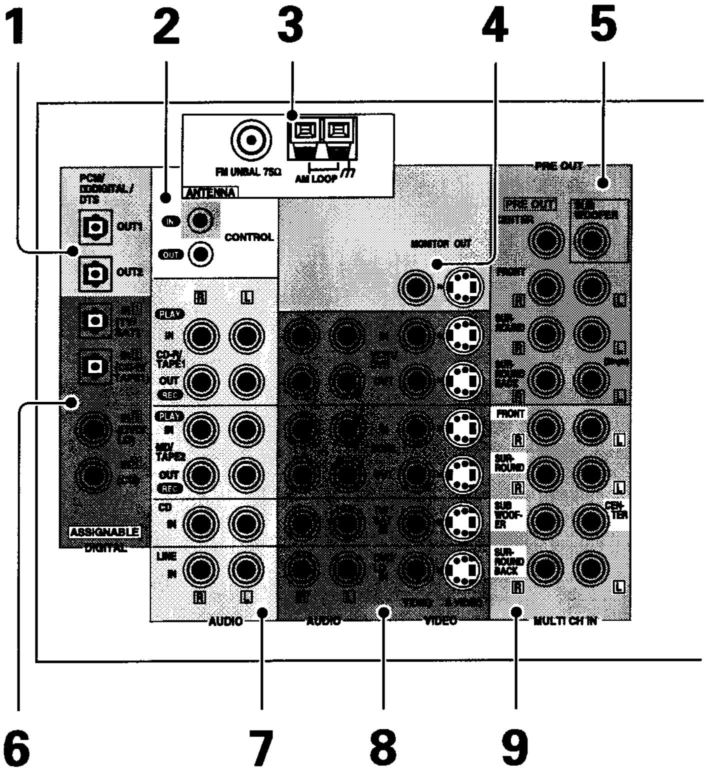
Use these terminals to input a multichannel surround signal (for example, a DVD-Audio signal) in an analog fashion. These are analog jacks.

17 COMPONENT VIDEO IN terminals

Use these terminals to hook up the video connections of your video components with this high quality method. Your components will have to have the terminals as well to take advantage of this kind of connection. If you don't connect as per the default settings you need to complete "Assigning the Component Video Inputs".

■ VSX-AX3-S, -K

All the terminals on the back panel are explained and/or referenced here.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FM UNBAL 75Ω
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ANTENNA
CONTROL
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PRE OUT
OUT1
OUT2
PLAY
CD-R/TAPE1
REC
MD/TAPE2
CD
LINE
FRONT
SURROUND
SURROUND BACK
SUB WOOFER
CENTER
ASSIGNABLE DIGITAL
AUDIO
VIDEO
MULTI CH IN
6
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1 DIGITAL OUT terminals
Use these terminals to output a digital signal to a DVD-R, CD-R, MD recorder or any other kind of digital recorder.

2 CONTROL IN/OUT terminals
You can use these jacks to hook up other PIONEER equipment, that has a CONTROL terminal, so that you can control them all by pointing the remote control(s) at one remote sensor.

3 Radio antenna terminals
Hook up antennas for the radio tuner built into the receiver here.

4 MONITOR OUT terminals (connect a TV or monitor here)
Use these terminals to output the video signal to your TV, video projector or monitor.

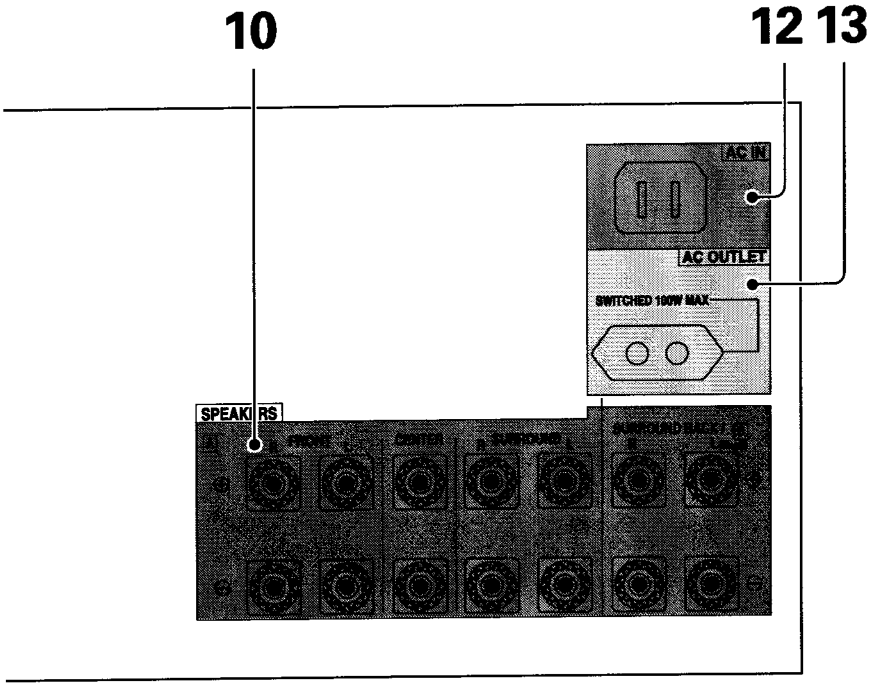
5 PRE OUT analog terminals (connect an amplifier here)
Use these terminals to output the audio signal from this amplifier to a different amplifier if thatís how you choose to set up your system.

6 DIGITAL IN terminals
Use these terminals to input the signal from a DVD, CD player or any other kind of digital player. To be able to play Dolby Digital and other surround soundtracks you need to make digital connections. To do this use the digital terminals here. If you donít connect as per the default settings you need to complete "Assigning the Digital Inputs" .

7 Audio input/output terminals (connect analog components here)
Use these terminals to input/output the audio signal from analog components (like a cassette deck or turntable). These are analog jacks.

8 Video components input/output terminals
Input/output signals from your video components (DVD, VCR, TV tuners, SAT tuners, etc.) here.

9 MULTI CH IN terminals
Use these terminals to input a multichannel surround signal (for example, a DVD-Audio signal) in an analog fashion. These are analog jacks.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AC IN
AC OUTLET
SWITCHED 100W MAX
SPEAKERS
FRONT
CENTER
SURROUND
SURROUND BACK
R
L

10 SPEAKERS terminals
Use these terminals to connect speakers to the receiver. The FRONT, CENTER and SURROUND terminals are for the main speaker system and the SURROUND BACK speakers can be set to either the main system, the SECOND ZONE, or the FRONT BI-AMP.

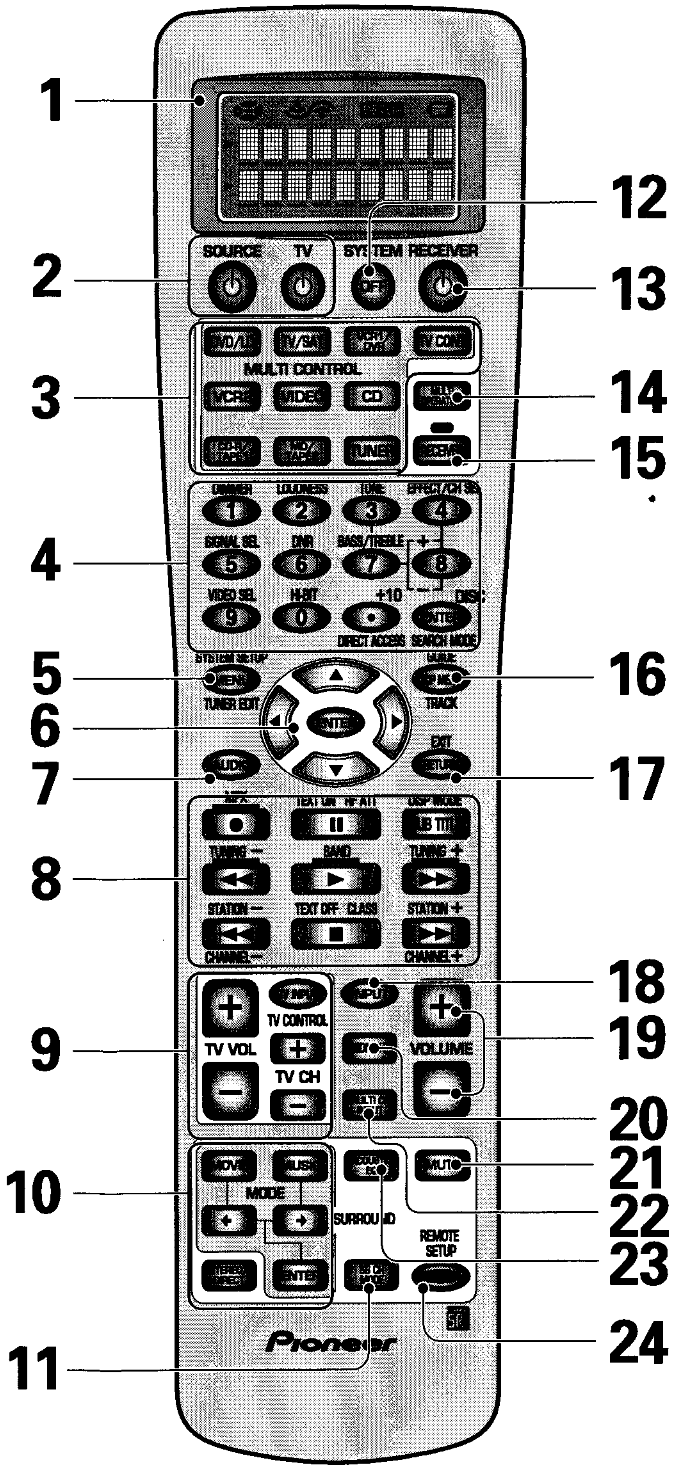
12 AC IN
Hook up the power cord to this terminal.

13 AC OUTLET
(switched, 100 W max)
Hook up an external component to the power supply of this receiver. Only do this with audio or video components being used in this system and never hook up heavy equipment (like TVs, heaters, air conditioners, refrigerators, etc.) to this receiver.

8.4 REMOTE CONTROL UNIT

■ VSX-AX5i-S

This page describes the buttons on the remote control used to operate the receiver.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SOURCE
TV
SYSTEM RECEIVER
MULTI CONTROL
TV VOL
TV CONTROL
TV CH
VOLUME
MODE
SURROUND
REMOTE SETUP
Pioneer

1 Remote Control Display Screen

2 SOURCE ⏻ button

Use this button to turn on/off other components. You must input the preset code in order to use this function.

TV ⏻ button

This is a dedicated TV button. Use it to turn on/ off your TV.

3 MULTI CONTROL buttons

These buttons are the basic controls that switch the mode of the receiver and the remote control, which allows you to control your other components.

TV CONT: Press so that the remote control can operate the TV control commands.

4 Number buttons

These can be used for many purposes depending on the mode of the remote control.

When in receiver mode the buttons operate as below:

DIMMER button

Use to adjust the brightness of the receiver's display.

LOUDNESS button

Switches the LOUDNESS mode on or off.

TONE button

This button switches between TONE on and off, which bypasses the tone circuitry.

BASS/TREBLE buttons

Use to select whether the bass or treble will be adjusted.

(+/–) buttons

Use to adjust the TONE level, effect level, channel level and sound delay as well as make Dolby Pro Logic II MUSIC parameter settings.

EFFECT/CH SEL button

Switches between the different channels so you can add volume individually to each channel with the + and – buttons. Also selects EFFECT mode, Dolby Pro Logic II MUSIC parameters and sound delay settings.
You can then use the + and – buttons to make these adjustments.

SIGNAL SEL button

Press repeatedly to select one of the following:

AUTO: If there are analog and digital signals input, the receiver automatically selects the digital signal.

DIGITAL: To select an optical or coaxial digital signal.

ANALOG: To select an analog signal.

DNR (DIGITAL NR) button

Switches the DIGITAL NR on or off.

VIDEO SEL button

Use to toggle between the different video input possibilities.

HI-BIT button

Use this button to switch the AUDIO SCALER on or off.

5 SYSTEM SETUP button

Use for all system setups, including the speaker and sound systems.
For a DVD player use this button to bring up the DVD menu and for a tuner use this button in the same way as the TUNER EDIT button.

6 ▲/▼/◄/►/ENTER buttons

These buttons can be used for a variety of operations in the SYSTEM SETUP menu.

These buttons are used to control the menus for other components when in those modes (DVD, digital TV tuner, satellite tuner, cable tuner, etc.). In TUNER mode, they can select a station and/or a frequency.

7 AUDIO button

Use to switch the audio tracks of a DVD when in DVD mode.

8 Command button for other components

Use these buttons to control other components you selected with the MULTI CONTROL buttons. You must input the preset code in order use this function.

9 TV CONTROL buttons

The following buttons are used to control the TV only and can be used once they are preset to control your TV.

TV INPUT: Press to select the input source for the TV.

TV CH +/– : Use these buttons to change the channel of the TV.

TV VOL +/– : Press to control the volume of the TV.

10 Listening mode buttons

SURROUND buttons (MOVIE, MUSIC, ←→ & ENTER):

MOVIE: Press to put the receiver into MOVIE listening mode.

MUSIC: Press to put the receiver into MUSIC listening mode.

←→: Use to select the MOVIE or MUSIC listening mode.

ENTER: Use this button to enter information concerning the listening modes.

STEREO/DIRECT: Switches the receiver into STEREO mode if it was in a different sound mode or toggles between DIRECT and STEREO mode.

11 SB CH MODE button

Use this button to turn the surround back channels ON/OFF/AUTO or switch the virtual surround back mode between ON/OFF/AUTO.

12 SYSTEM OFF button

This button turns off components in two ways. First, when pressed it will turn off all PIONEER components. Secondly, any component that has programmed into the SYSTEM OFF settings will be turned off.

13 ⏻ RECEIVER (STANDBY/ON) button

Press to turn power of the receiver on or to standby (off).

14 MULTI OPERATION button

Use this button to start the multi operation mode.

15 RECEIVER button

Use this button to switch the remote control into receiver mode in order to get certain receiver functions or do receiver setups.

16 TOP MENU/GUIDE button

Use to find stations or menus on a digital TV tuner. For a DVD player use this button to bring up the DVD menu.

17 RETURN button

When you are in a receiver setup operation this button will go back one step in the SYSTEM SETUP procedure. When you are using your DVD menu screen this button acts the same as the DVD player's "Return" button. When you are using cable tuners, satellite tuners or digital TV tuners this button will either exit you from the menu screen or act like a "Return" button above, depending on the maker of the unit.

18 INPUT button

Press to select an input source. The button will cycle through all the possible sources including USB, PHONO and i.LINK components.

19 VOLUME (+/–) buttons

Use to raise or lower the volume of the receiver.

20 MIDNIGHT button

Switches the MIDNIGHT listening mode on or off.

21 MUTE button

Press to mute or restore the volume.

22 MULTI CH INPUT button

Use this button to select the component you have hooked up to the MULTI CH IN terminals (for example, a DVD-Audio player).

23 ACOUSTIC CAL button

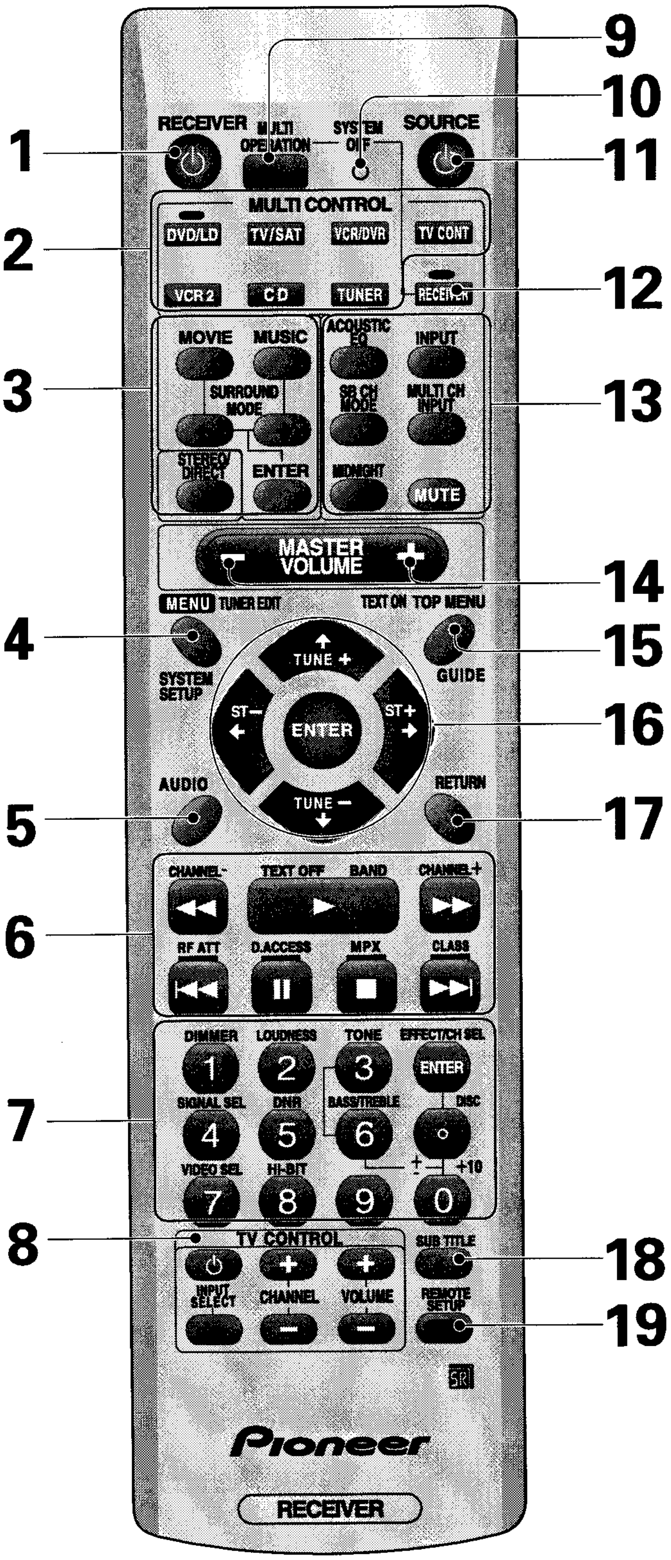
Press to switch on/off and select the type of acoustic calibration EQ.

24 REMOTE SETUP button

Use to customize the remote control functions and the remote control itself.

■ VSX-AX3-S, -K

This page describes the buttons on the remote control used to operate the receiver.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RECEIVER
MULTI OPERATION
SYSTEM OFF
SOURCE
MULTI CONTROL
DVD/LD
TV/SAT
VCR/DVR
TV CONT
VCR2
CD
TUNER
RECEIVER
MOVIE
MUSIC
ACOUSTIC EQ
INPUT
SURROUND MODE
SB CH MODE
MULTI CH INPUT
STEREO/DIRECT
ENTER
MIDNIGHT
MUTE
MASTER VOLUME
MENU
TUNER EDIT
TEXT ON
TOP MENU
TUNE +
SYSTEM SETUP
GUIDE
ST−
ENTER
ST+
AUDIO
RETURN
TUNE −
CHANNEL−
TEXT OFF
BAND
CHANNEL+
RF ATT
D.ACCESS
MPX
CLASS
DIMMER
LOUDNESS
TONE
EFFECT/CH SEL
1
2
3
ENTER
SIGNAL SEL
DNR
BASS/TREBLE
DISC
4
5
6
VIDEO SEL
HI-BIT
+10
7
8
9
0
TV CONTROL
INPUT SELECT
CHANNEL
VOLUME
SUB TITLE
REMOTE SETUP
SR
Pioneer
RECEIVER

1 ⏻ RECEIVER (STANDBY/ON) button
Press to turn power of the receiver on or to standby (off).

2 MULTI CONTROL buttons
These buttons are the basic controls that switch the mode of the receiver and the remote control, which allows you to control your other components.

TV CONT: Press so that the remote control can operate the TV control commands.

3 Listening mode buttons

SURROUND buttons (MOVIE, MUSIC, ⇐⇒ & ENTER):

MOVIE: Press to put the receiver into MOVIE listening mode.

MUSIC: Press to put the receiver into MUSIC listening mode.

⇐⇒ : Use to select the MOVIE or MUSIC listening mode.

ENTER: Use this button to enter information concerning the listening modes.

STEREO/DIRECT: Switches the receiver into STEREO mode if it was in a different sound mode or toggles between DIRECT and STEREO mode.

4 SYSTEM SETUP button
Use for all system setups, including the speaker and sound systems. For more information see ìSetting Up for Surround Soundî starting on page 36. For a DVD player use this button to bring up the DVD menu and for a tuner use this button in the same way as the TUNER EDIT button.

5 AUDIO button

Use to switch the audio tracks of a DVD when in DVD mode.

6 Command button for other components

Use these buttons to control other components you selected with the MULTI CONTROL buttons. You must input the preset code in order use this function.

7 Number buttons

These can be used for many purposes depending on the mode of the remote control.

When in receiver mode the buttons operate as below:

DIMMER button

Use to adjust the brightness of the receiverís display.

LOUDNESS button

Switches the LOUDNESS mode on or off.

TONE button

This button switches between TONE on and off, which bypasses the tone circuitry.

BASS/TREBLE buttons

Use to select whether the bass or treble will be adjusted.

(+/–) buttons

Use to adjust the TONE level, effect level, channel level and sound delay as well as make Dolby Pro Logic II MUSIC parameter settings.

EFFECT/CH SEL button

Switches between the different channels so you can add volume individually to each channel with the + and – buttons. Also selects EFFECT mode, Dolby Pro Logic II MUSIC parameters and sound delay settings.
You can then use the + and – buttons to make these adjustments.

SIGNAL SEL button

Press repeatedly to select one of the following:

AUTO – If there are analog and digital signals input, the receiver automatically selects the digital signal.

DIGITAL – To select an optical or coaxial digital signal.

ANALOG – To select an analog signal.

DNR (DIGITAL NR) button

Switches the DIGITAL NR on or off.

VIDEO SEL button

Use to toggle between the different video input possibilities.

HI-BIT button

Use this button to switch the AUDIO SCALER on or off.

8 TV CONTROL buttons

The following buttons are used to control the TV only and can be used once they are preset to control your TV.

TV ⏻ button

This is a dedicated TV button. Use it to turn on/off your TV.

INPUT SELECT: Press to select the input source for the TV.

CHANNEL +/– : Use these buttons to change the channel of the TV.

VOLUME +/– : Press to control the volume of the TV.

9 MULTI OPERATION button

Use this button with MULTI OPERATION and SYSTEM OFF.

10 LED display

This display flashes when a command is sent from the remote control to the receiver. It also flashes at other times, for example when teaching the receiver preset codes.

11 SOURCE ⏻ button

Use this button to turn on/off other components. You must input the preset code in order to use this function.

12 RECEIVER button

Use this button to switch the remote control into receiver mode in order to get certain receiver functions or do receiver setups.

13 Receiver functions

ACOUSTIC EQ button

Press to switch on/off and select the type of acoustic calibration EQ.

INPUT button

Press to select an input source. The button will cycle through all the possible sources.

SB CH MODE button

Use this button to turn the surround back channels ON/OFF/AUTO or switch the virtual surround back mode between ON/OFF/AUTO.

MULTI CH INPUT button

Use this button to select the component you have hooked up to the MULTI CH IN terminals (for example, a DVD-Audio player).

MIDNIGHT button

Switches the MIDNIGHT listening mode on or off.

MUTE button

Press to mute or restore the volume.

14 MASTER VOLUME (+/–) buttons

Use to raise or lower the volume of the receiver.

15 TOP MENU/GUIDE button

Use to find stations or menus on a digital TV tuner. For a DVD player use this button to bring up the DVD menu.

16 ▲/▼/◀/▶/ENTER buttons

These buttons can be used for a variety of operations in the SYSTEM SETUP menu.

These buttons are used to control the menus for other components when in those modes (DVD, digital TV tuner, satellite tuner, cable tuner, etc.). In TUNER mode, they can select a station and/or a frequency.

17 RETURN button

When you are in a receiver setup operation this button will go back one step in the SYSTEM SETUP procedure. When you are using your DVD menu screen this button acts the same as the DVD player's ìReturnî button. When you are using cable tuners, satellite tuners or digital TV tuners this button will either exit you from the menu screen or act like a ìReturnî button above, depending on the maker of the unit.

18 SUB TITLE button

Use to switch the subtitles on a DVD player or disc.

19 REMOTE SETUP button

Use to customize the remote control functions and the remote control itself.

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